

# The Mining Journal, RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The Mining Journal is Registered at the General Post Office as a Newspaper and for Transmission Abroad.]

No. 2426.—Vol. LII.

LONDON, SATURDAY, FEBRUARY 18, 1882.

[WITH SUPPLEMENT.] PRICE SIXPENCE PER ANNUM, BY POST 4s.

**MR. JAMES H. CROFTS, STOCK AND SHARE BROKER, AND MINING SHARE DEALER,**  
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.  
ESTABLISHED 1842.

BUSINESS transacted in all descriptions of MINING Stocks and Shares (British and Foreign), Consols, Bonds (Foreign and Colonial), Railways, Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas, Water, and Dock Shares, and all Miscellaneous Shares.  
Business negotiated in Stocks and Shares not having a general market value.  
Every Friday a general and reliable List issued (a copy of which will be forwarded on application), containing closing prices of the week.

**MINES INSPECTED.**  
BANKERS: CITY BANK, LONDON—SOUTH CORNWALL BANK, ST. AUSTELL.

**SPECIAL DEALINGS in the following, or part:—**  
50 Arundel, £2 1s. 3d. 50 Hingston Down, 18s. 9d. 50 Pestarena, 4s. 3d.  
50 Almada, 6s. 100 Herodfoot, 7s. 6d. 25 Ruby, £2 1/2.  
50 Bedford United, 25s. 25 Indian Kingdon, 12s. 3d. 20 Richmond, £10 1/2.  
50 Bratsberg, 29s. 100 Javali, 6s. 20 Roman Gravel, £10.  
50 British United, 21s. 3d. 25 Kilmish, £2 1/2. 25 S. Indian Gold, 21s. 3d. 25 S. E. Wynad, 22s. 6d.  
50 Carnarvon Cop., 15s. 50 Kapanga, 10s. 10 S. Condurow, £9 1/2. 30 So. Darren, 25s.  
50 Callao Bie, 10s. 100 Langford, 10s. 25 S. E. Wynad, 22s. 6d. 30 S. Penstruthal, 6s.  
50 Devon Con., £7 1/2. 100 Last Chance, 10s. 9d. 25 S. E. Wynad, 22s. 6d. 30 S. Penstruthal, 6s.  
50 Devon Friend, 9s. 6d. 20 Leadhills, £2 1/2. 25 Santa Barbara, £22s. 6d. 50 So. Devon Unl., 17s. 6d.  
50 East Caradon, 10s. 25 Morla Du, 9s. 50 Sortridge, 10s.  
50 E. Chiverton, £1 10s. 25 Mysore Reef, 5s. 50 Tanker, 6s. 50 S. E. Wynad, 22s. 6d.  
25 East Lovell, £2 1/2. 50 Parys Copper, 13s. 25 United Van Con., 12s. 6d. 50 So. Devon Unl., 17s. 6d.  
25 E. Roman Grav., 17s. 6d. 25 No. Penstruthal, 10s. 25 West Phoenix, 17s. 6d. 50 Sortridge, 10s.  
50 English Australian Gold, 12s. 100 New W. Caradon, 5s. 50 West Caradon, 10s.  
20 East Van, 15s. 150 Pandora, 8s. 9d. 50 West Polbrean, 27s. 6d.  
20 Frontino, £3. 50 Polrose, 7s. 6d. 50 Wheel Crebor, £2 8s. 9d.  
25 Glenrock, 22s. 50 Port Phillip, 5s. 50 West Crebor, 5s.  
25 Glenroy, 7s. 6d. 50 Potosi, 16s. 3d. 10 West Kitty, £2 1/2.  
25 Gold Coast, 30s. 50 Parys Copper, 13s. 20 Wheel Jane, 20s.  
15 Grogwinion. 25 Panulicillo, £5 1/2. 100 Wheel Jewell, 10s. 3d.  
100 Gt. So. Mysore, 5s. 100 Prince of Wales, 12s. 25 Wheel Kitty, 15s.

\* \* SHARES SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TWENTY PER CENT.

\* \* SPECIAL BUSINESS AT CLOSE PRICES in all Market TIN, COPPER and LEAD SHARES.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.  
ESTABLISHED 1842.

**RAILWAYS—FOREIGN BONDS—SPECIAL BUSINESS.**  
Fortnightly Accounts opened on receipt of the usual cover.  
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**AMERICAN AND CANADIAN STOCKS AND SHARES—SPECIAL BUSINESS.**  
Fortnightly Accounts opened on receipt of the usual cover.  
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**INDIAN GOLD MINES—SPECIAL BUSINESS in:—**  
Cotacavil. Indian Kingdon. Rhodes Reef. South-East Wynad.  
Devala Moyer. Indian Trevelyan. South Indian Gold.  
Devala Central. Mysore. Tambracherry.  
Great Southern Mysore. Mysore Reefs. Wynad Perseverance.  
Indian Glenrock. Oregum.  
Indian Phoenix. Oregum.

At CLOSE MARKET PRICES, free of commission.

\* \* Reliable information given on any of the above. A daily price list issued giving closing quotations. SPECIAL BUSINESS in La Plata, Rio Tinto, Frontino and Bolivia, Potosi, Ruby, Nouveau Monde, and Richmond.

\* \* SHARES in the ABOVE INDIAN OR OTHER GOLD AND SILVER MINES SOLD FOR FORWARD DELIVERY ONE, TWO, OR THREE MONTHS ON DEPOSIT OF TWENTY PER CENT.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**MR. W. H. BUMPUS, STOCK AND SHARE BROKER, AND MINING SHARE DEALER**  
44, THREADNEEDLE STREET, LONDON, E.C.  
ESTABLISHED 1867.

BUSINESS transacted in STOCK EXCHANGE SECURITIES and MISCELLANEOUS SHARES of every description.  
RAILWAYS, BANKS, FOREIGN and COLONIAL BONDS, TRAMWAYS, TELEGRAPHS, and all the LEADING INVESTMENTS.  
Accounts opened for the Fortnightly Settlement.

A List of Investments free on application.

Mr. BUMPUS has SPECIAL BUSINESS in the undermentioned:—

70 Almada, 5s. 6d. 100 Goodevere, 23s. 6d. 40 Panulicillo, £5 11s. 3d.  
150 Alankoo. 50 Gold Coast, 30s. 50 Parys Copper.  
50 Bratsberg, 29s. 9d. 25 Great Holway. 25 Prince of Wales, 12s. 6d.  
50 Bedford United. 25 Hingston Down, 20s. 10 Rio Tinto.  
50 Carnarvon Cop., 15s. 100 Indian Glenrock, 22s. 100 Rhodes Reef, 12s. 3d.  
50 Carn Brea. 100 Indian Phoenix, 16s. 9d. 25 Ruby, 46s. 3d.  
60 Colorado, 36s. 6d. 20 Kilmish, £2 1/2. 25 Richmond, £10 1/2.  
25 Copiapo, £3 1s. 9d. 50 Kit Hill. 5 South Condurow.  
100 Callao Bie. 130 La Plata, 43s. 6d. 25 South Crebor, 12s. 6d.  
150 Devala-Moyer, 19s. 3d. 25 Leadhills, £2 1/2. 100 Tankerville.  
75 Dev. Friendship. 50 Marke Valley, 15s. 6d. 50 W. Godolphin, £2.  
15 Devon Consols, £2. 15 New Recor. 25 West Kitty.  
40 Don Pedro, 6s. 6d. 100 Nouv. Monde, 4s. 9d. 20 Wh. Grenville, £11 1/2.  
50 East Blue Hills. 75 New West Caradon. x. d.  
100 Eberhardt, 10s. 6d. 25 New Quebrada, £4 3s. 9d. 25 Wheel Crebor, £2 1/2.  
25 East Caradon, 5s. 3d. 50 Pen-yr-Oscedd. 50 Wheel Jewell, 10s. 6d.  
20 Frontino, £2 19s. 6d. 100 Potosi, 15s. 100 West Crebor.  
10 Great Lasey. 200 Port Phillip, 4s.

SPECIAL BUSINESS, at close prices, in the SHARES of all the principal HOME and FOREIGN MINES.

Mr. BUMPUS devotes special attention to these Securities, and is in a position to afford reliable information and advice to intending investors and others.

IMPORTANT TO INVESTORS.—Shares in SOUND DIVIDEND and PROGRESSIVE MINES (particularly TIN and COPPER) should be bought at present prices, as many of them are likely to have a considerable rise before long. There is every probability that much higher quotations will rule within the next few months.

The following are particularly recommended:—

WHEAL GRENVILLE. WEST GODOLPHIN.  
WEST KITTY. WHEAL BOYS.  
WEST PEVOR. DEVON FRIENDSHIP.  
GREAT HOLWAY. NEW TRUMPET CONSOLS.

WILLIAM HENRY BUMPUS, SWORN BROKER.

OFFICES: 44, THREADNEEDLE STREET, LONDON, E.C.  
ESTABLISHED 1867.

**MR. GEORGE BUDGE, STOCK AND SHARE DEALER**  
9, GRACECHURCH STREET, LONDON, E.C. (Established 23 years).  
ALL BUSINESS TRANSACTED FREE OF ANY CHARGE FOR COMMISSION.

Notice to Investors and Speculators. Mr. BUDGE has DEALINGS in:—

100 Bratsberg. 10 Sortridge Copper. 70 Sortridge Copper.  
50 Bedford United. 50 Herodfoot. 60 South Darren.  
50 Carnarvon. 25 Hingston Down. 50 South Devon.  
2 Carn Brea. 100 Kapanga. 100 South East Wynad.  
100 Devon Friend. 15 Morla Du. 100 South Tolcarne.  
150 Don Pedro. 50 Langford. 100 Tolima.  
25 D'Ereshy Mount. Lead 20 New West Caradon. 100 West Polbrean.  
10 East Van. 20 New Kitty. 75 West Caradon.  
25 East Blue Hills. 30 Okel Tor. 40 West Godolphin.  
45 East Caradon. 50 Penhalls. 20 West Phoenix.  
50 Gawton. 75 Prince of Wales. 70 Wheel Jewell.  
70 Glenroy. 52 Parys Copper. 20 Wheel Jewell.  
100 Gold Coast. 100 Pelyn Wood. 20 Wheel Jewell.  
20 Grogwinion. 50 Polrose. 20 Yatwith.

SPECIAL BUSINESS in West Polbrean, Wheel Agar, West Kitty, Penhalls, New Kit, Frongoch, Goginan, Gawton, and East Blue Hills.

**BRITISH AND FOREIGN MINING OFFICES.**

**Messrs. PETER WATSON AND CO.,**  
AUSTIN PRIARS  
OLD BROAD STREET, LONDON, E.C.  
BANKERS: THE ALLIANCE BANK (Limited).

**Messrs. PETER WATSON AND CO.'S**  
BRITISH AND FOREIGN MONTHLY MINING NEWS  
—STOCK AND SHARE INVESTMENT NOTES—MINES,  
MINERALS, AND METAL MARKETS—SHARE LIST,  
No. 839, Vol. XVII., for FEBRUARY month, will shortly be ready, and will be sent to customers on application.

Annual Subscription..... 5s. | Single Copy..... 6d.

**Messrs. PETER WATSON AND CO.,**  
13, AUSTIN PRIARS, E.C.

**MR. ALFRED E. COOKE,**  
DEALER IN BRITISH AND FOREIGN STOCKS AND SHARES  
OF EVERY DESCRIPTION.  
(FROM 25, OLD BROAD STREET)  
ESTABLISHED 1853.  
9, OLD BROAD STREET, LONDON.

**STOCKS AND SHARES FOR SALE.**

Mr. ALFRED E. COOKE can sell the following lots (or any smaller number of shares) to immediate applicants at prices annexed, free of commission.

Where prices are not inserted, the market price of the day will be taken, or offers may be made:—

20 Bedford United Cop., £1 1/2. 40 Hoover Hill, 3s. 5 R. Gravel Lead, £9 1/2.  
50 Bratsberg Cop., 27s. 9d. 40 Indian Glenrock Gold 100 Prince of Wales Cop. 12s.  
20 Carnarvon Copper, 14s. 55 Indian Trevelyan 10 Richmond Silver, 10 1/2.  
20 Callao Bie Gold, 9s. 40 Gold, 14s. 5d. 20 Ruby, £2 1/2.  
50 D'Ereshy Mount Lead, 12s. 15 Kilmish Tin, £2 1/2. 20 So. Devon Cop. 20s.  
50 Devala Gold, 13s. 50 La Plata Lead, 44s. 50 South-East Wynad Gold 23s. 6d.  
60 Devon Friend, 7s. 6d. 15 Leadhills, £2 1/2. 40 So. Indian Gold, 22s.  
50 Devon Gt. Unl. 12s. 6d. 25 Langford Silver and 40 Sortridge Copper and Tin.  
50 Devon Con. Cop., £7 1/2. 40 Mona Con. Cop., 22s. 20 Tamar Silver Lead.  
1 Dolcoath Tin, £31. 10 Morla Du, 8s. 6d. 130 Tanker, Gt. Con., 5s.  
50 Don Pedro Gold, 6s. 3d. 20 Mysore Gold, 23s. 3d. 100 W. Crebor Cop., 3s. 6d.  
10 East Lovell Tin, £2 1/2. 20 Michipicoten Copper. 25 West Phoenix Tin and Copper, 17s. 6d.  
120 East Roman Gravel Lead, 15s. 60 Mysore Reef Gold, 5s. 50 West Kitty Tin, £2 1/2.  
150 East Rose Lead, 3/4 pd. 10 New West Caradon 5 West Kitty Tin, £2 1/2.  
80 East Blue Hills Tin, 11s. 6d. 40 No. Herodfoot, 5s. 40 West Polbrean Tin, £1 1/2.  
50 Eng.-Australian Gold 4s. 3d. 50 Nouveau Monde Gold 15 Wheel Agar Tin, £11 1/2.  
25 Frontino Gold, £3. 40 Polrose Tin. 30 Wheel Crebor Copper £2 1/2.  
30 Gawton Copper, 12s. 50 Potosi Gold, 15s. 6d. 30 West Lisburne Lead 20s.  
20 Gunnislake (Clitters) 100 Parys Copper, 12s. 3d. 30 Pioneer Copper and Lead, 16s. 3d.  
15 Herodfoot Lead. 30 Pioneer Copper and Lead, 16s. 3d.

Many of the above shares can be sold for settlement by arrangement at end March on payment of 20 per cent. deposit. Shares not found in the above list may be purchased on application.

N.B.—The present is a most favourable time to purchase shares in ESTABLISHED TIN and COPPER MINES at cheap prices.

Mr. Alfred E. Cooke is buyer of shares in all the LEADING MINES at current market price.

**THE INVESTOR'S GAZETTE.**

NEW NUMBER NEXT FRIDAY. Will be forwarded to BONA FIDE INVESTORS free on application.

**ENGLISH AND AMERICAN RAILWAYS.**

SPECIAL REPORT on the markets, and DAILY or WEEKLY PRICE LIST forwarded on application. Business executed at close net prices either for INVESTMENT or SPECULATION.

TELEGRAMS and LETTERS receive immediate attention. All shares currently dealt in, bought and sold, free of commission.

**ALFRED E. COOKE, 9, OLD BROAD STREET, LONDON.**

(Opposite the Stock Exchange, with which the office is in DIRECT TELEGRAPHIC COMMUNICATION.)

**STOCKS AND SHARES.**

**MR. JAMES STOCKER, STOCKBROKER,**  
2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

Has special business in the following for cash or settlement by arrangement:—

Bratsberg United. Gold Coast. Prince of Wales.  
Bratsberg. Gunnislake (Clitters). Potosi.  
Bwlch. Hoover Hill. Rhodes Reef.  
Devala Moyer. Indian Glenrock. Ruby.  
D'Ereshy Mountain. Isabelle. Richmond.  
Devon Consols. Kilmish. Souaback.  
Devon Friendship. Kapanga. Van.  
Drakewalls. La Plata. Van and Glyn.  
Eberhardt. Michipicoten. Wheel Crebor.  
East Blue Hills. Mysore. Wheel Jane.  
East Romans. Parys Corporation. West Caradon.  
East Lovell. Pioneer. Wynad Perseverance.  
Frontino.

BANKERS: LONDON AND WESTMINSTER.

**FERDINAND R. KIRK, STOCKBROKER,**  
5, BIRCHIN-LANE, LONDON, E.C.

Fortnightly Accounts opened in all Stock Exchange Securities on receipt of the usual cover.

BANKERS: LONDON AND WESTMINSTER, Lothbury.

**HOLACE J. TAYLOR, STOCK AND SHARE DEALER,**  
35, GREAT ST. HELEN'S, LONDON, E.C.

BANKERS: THE CENTRAL BANK OF LONDON (Limited).

**JOHN B. REYNOLDS, STOCK AND SHARE DEALER,**  
27, WALBROOK, LONDON, E.C.

ESTABLISHED 25 YEARS.  
BANKERS: LONDON JOINT-STOCK.

**SPECIALITY.**

CORNISH MINES.—Shares dealt in at net prices, and reliable information obtained.

WEST KITTY.

These shares are being widely bought for an important rise.

THE STATE OF MARKETS.

See Mr. Reynolds's article on page 197.

**MR. W. MARLBOROUGH, STOCK AND SHARE DEALER,**  
29, BISHOPSGATE STREET, LONDON, E.C. (Established 28 years).

Can sell the following SHARES at prices annexed:—

40 Bedford Unit., 23s. 9d. 25 Hingston Down, 18s. 9d. 100 Pestarena, 4s. 3d.  
25 British United, 24s. 40 Indian Glen., 22s. 6d. 75 Quartz Hill, 5s.  
20 Colorado, £1 17s. 6d. 40 Indian Phoenix, 17s. 6d. 50 Rhodes Reef, 12s. 6d.  
100 Chontales, 3s. 9d. 100 I.X.L., 3s. 9d. 25 Ruby, £2 1/2.  
100 Corporation South 50 Indian Trevel., 13s. 9d. 50 Russia Copper, 20s.  
Australia. 50 Kapanga, 6s. 10 S. Condurow, £9 1/2.  
50 Dev. Friendship, 9s. 3d. 25 Kit Hill, 12s. 6d. 25 South Darren, 26s. 3d.  
10 Devon Consols, £7 1/2. 30 Langford, 10s. 9d. 50 Scottish Australian, 32s.  
75 Don Pedro Gold, 7s. 6d. 30 Leadhills, £2 3s. 9d. 50 Tin Hill, 12s. 6d.  
50 E. Roman Gravel, 14s. 25 Marke Valley, 16s. 3d. 40 Tankerville, 5s. 6d.  
14s. 50 Mysore Gold, 22s. 6d. 100 Van Consols, 14s.  
20 Eberhardt, 10s. 0d. 50 N. Trumpet Con. 60 West Crebor, 6s. 3d.  
30 East Blue Hills, 12s. 9d. 40 N. W. Caradon, 6s. 3d. 40 West Lisburne, 18s.  
75 Exchequer, 3s. 9d. 20 New Kitty, £2 2s. 6d. 30 Wheel Jane, 22s. 6d.  
10 East Caradon, 5s. 6d. 50 Organo Gold. 20 Wheel Crebor, £2 1/2.  
call paid. 50 Oregum, 10s. 6d. 100 Wynad District, 6s.  
20 Frontino, £2 2s. 6d. 100 Port Phillip, 4s. 6d. 100 West Caradon, 6s.  
20 Gunnislake (Clitters), 2s. 100 P. of Wales, 12s. 3d. 25 Wentworth Gold 10s. 6d.  
40 Gold Coast, 28s. 9d. 100 Parys Corpora., 13s.

BANKERS: ALLIANCE BANK (Limited).

**THE "DIFFERENTIAL" PUMPING ENGINE**  
(DAVEY'S PATENT),

FOR  
DRAINING MINES, WATER SUPPLY OF TOWNS, IRRIGATION,  
SUPPLYING DOCKS, PUMPING SEWAGE, and GENERAL  
PUMPING PURPOSES.

**HATHORN, DAVEY, AND CO.,**  
LEEDS.

HATHORN, DAVEY, and Co. have Patterns of "Differential" Engines of all sizes, from 5 to 500-horse power, and have facilities for supplying very power full Engines and Pumps at a short notice.

See Illustrated Advertisement every alternate week.

**MR. CHARLES THOMAS,**  
MINING AGENT, STOCK AND SHARE DEALER,  
3, GREAT ST. HELEN'S, LONDON, E.C.

**MR. ALFRED THOMAS,**  
MINING AGENT, AND STOCK AND SHARE DEALER,  
10, COLEMAN STREET, LONDON, E.C.

MINING INVESTMENTS.—Third Edition, just published.

"What to Select, and What to Avoid," by ALFRED THOMAS, 10, Coleman-street, London, E.C. Will be forwarded on receipt of 12 stamps.

**MR. EDWARD ASHMEAD, 2, DRAPER'S GARDENS, E.C.,**  
MINING SECRETARY, AUDITOR, AND ACCOUNTANT.

**MR. W. B. COBB, STOCK AND SHARE DEALER,**  
29, BISHOPSGATE-STREET, LONDON, E.C.

**MR. JOHN RISLEY, STOCK AND SHARE BROKER,**  
38, CORNHILL, LONDON, E.C.  
ESTABLISHED TWENTY YEARS.  
BANKERS: LONDON AND WESTMINSTER (Lothbury).

**MR. E. J. BARTLETT, 30, GREAT ST. HELENS, LONDON,**  
E.C., has special dealings in Stock Exchange Securities and Miscellaneous Shares of every description.

Circulation ever increasing. Sixteenth Edition just out.

"HOW TO INVEST."

"More valuable than ever."—Fide public Press. Post free 1s.

Published by E. J. BARTLETT, F.R.G.S., 30, Great St. Helens, London, E.C.

**Messrs. ENDEAN AND CO., STOCK AND SHARE DEALERS,**  
85, GRACECHURCH STREET, LONDON, E.C.  
ESTABLISHED 1861.  
BANKERS: London and Westminster, Lothbury, E.C.

**Messrs. ABBOTT AND WICKETT,**  
STOCK AND SHARE BROKERS, REDRUTH,  
ORDERS BY TELEGRAM PROMPTLY EXECUTED.

**Messrs. F. E. WATSON AND CO.,**  
FINANCIAL AGENTS,  
STOCK AND SHARE DEALERS,  
4, COTTHALL BUILDINGS,  
THROGMORTON STREET LONDON, E.C.

F. E. W. and Co. strongly recommend an investment in the following companies at present prices:—

British & Foreign Boat East Chilton Man- Ferran Silver-Ld., 22s. 6d.  
Lowering, 27s. 6d. ganese, 45s.

**GRANVILLE SHARP, STOCK AND SHARE DEALER,**  
32, QUEEN VICTORIA STREET, LONDON, E.C.

Still recommends the purchase of shares in SOUND BRITISH MINES for advance in price and increased dividends. In consequence of the generally improving condition of Trade and Commerce, the market for all metals must necessarily continue to improve, and the shares in all Sound British Mines are certain to advance proportionately.

**EAST CHIVERTON SILVER-LEAD MINES.**

GRANVILLE SHARP specially recommends the purchase of shares, the mine being on the eve of proving a very valuable property, as evidenced by the recent important discovery in the 95 fm. level driving west, where a course of rich silver-lead ore already proved for over 30 fms., and has opened up valuable reserves which are being increased daily from that (95 fm.) level and the level over. A second 50-ton parcel of the ore was sold recently realising £631 5s. It is an important fact that EAST CHIVERTON MINE is on the same lode which in the mine immediately west produced between the years 1853 and 1872 silver-lead ore that realised very nearly HALF A MILLION STERLING, and between 1875 and 1880 LEAD and BLENDE ORES amounting to £110,000. These facts can be verified by the books in Mr. Granville Sharp's possession, at 32, Queen Victoria-street, E.C.

BANKERS: London and Westminster, E.C.

**MR. H. L. A. M. BERT,**  
STOCK AND SHARE BROKER,  
42, OLD BROAD STREET, E.C.

Mr. LAMBERT, having daily communication with Agents in Cornwall, is in a position to transact BUSINESS in MINING SHARES at the lowest quotations of the day; also to advise for the selection of Securities, and to procure independent inspections, trustworthy Reports, &c., on advantageous terms.

The following PROGRESSIVE MINES are specially selected for recommendation as likely to experience a speedy and considerable rise:—

HAWKINS HILL (Gold), from which good dividends may confidently be expected sooner than from any of the Indian Mines. Issue fully allotted, and quotation applied for. A few of the 5s. paid shares offered at 6d. premium. Not more than 10s. per share is likely to be called up.

SOUTH DOLCOATH (Tin and Copper), in which splendid specimens of grey and yellow ore are being met with, some of which may be seen at my office, and every foot advanced opens richer ground. Shares 17s. 6d.

BANKERS: THE ALLIANCE BANK (Limited).

**Messrs. H. MANSELL AND CO., STOCK AND SHARE DEALERS,**  
19, BISHOPSGATE STREET WITHIN, LONDON, E.C.

The following SHARES are FOR SALE at prices affixed:—

100 Silver Peak, 6s. 9d. 150 Standard Bank. 25 Hornachos, £6.  
20 Richmond, £9 1/2. 20 Devon Consols, £7 1/2. 25 Tamar Silver-Lead.  
2 Dolcoath. 50 Carn Camborne. 20 Van.  
15 Mona. 100 Wheel Jane. 5 Cook's Kitchen.  
25 Bodidris. 10 Wheel Grenville. 50 Hudson Bay, £23 1/2.  
50 La Plata, £2 1/2. 50 Wheel Jewell. 50 Gawton, 15s.  
30 Bedford United. 75 Bratsberg, 31s. 40 Wheel Crebor, £2.  
50 Carnarvonshire Great 200 Prince of Wales, 15s. 300 Herodfoot.  
Consols, 20s. 50 Michipicoten, 21s. 3d. 50 Devon Friendship, 9s. 6d.  
50 Ruby, £2 2s. 6d. 300 E. Craven Moor. 10 Wheel Agar.  
30 West Phoenix. 200 Organo Gold, £1 1s. 10 Wheel Agar.  
BUYERS of Carnarvonshire Great Consols, Grenville, Tamar, Carn Camborne, and Van Consols and Glyn. Sellers must state very lowest price.

\* Recommended for a rise in price. Where no price is quoted offers may be made.

**MR. ALEXANDER DAVIDSON,**  
STOCK AND SHARE DEALER,  
139, LEADENHALL STREET, LONDON, E.C.

OFFERS CAN BE MADE for the following, which are FOR SALE under quoted prices FOR CASH on receipt of transfer:—

125 Bratsberg. 95 Hingston Down. 65 South Darren.  
130 Devon Friendship. 110 Kilmish. 150 Sortridge Consols.  
28 Derwent. 110 La Plata, £2 3s. 9d. 50 Tamar Silver-Lead.  
50 East Blue Hills. 25 Mona, £7 (or less). 20 Van.  
140 E. W. Rose, £1 pd. 110 Organo Gold. 200 West Crebor.  
90 E. W. Rose, 15s. paid. 100 Parys. 52 West Phoenix.  
60 Gawton. 200 Prince of Wales. 120 Wheel Crebor.  
50 Great Polgoth Untd. 80 Potosi. 85 Wheel Jewell.  
110 Richmond.

SHARES WANTED.—100 South Devon United, 30 Roman Gravel.



## THE DIVIDEND MINES OF 1881.

WORKED BY PUBLIC COMPANIES.

Compiled from Official Sources by EDWARD ASHMEAD, F.C.A., 2, Drapers' Gardens, London.

## BRITISH METALLIFEROUS DIVIDEND MINES OF 1881.

Title of Mining Company.	Situation of Mine.	Year Company commenced.	Ore sold in 1881.			Rate of dues.	Existing allotted capital.			Total amount divided in dividends.	Dividends declared in 1881.	
			Description of ore.	Number of tons.	Amount.		Shares.	Paid.	Total.		Per share.	Total.
1.—Blue Hills, Cost-book .....	St. Agnes, Cornwall.....	1869	Tin .....	105	5,803 16 4	1-24th	5,000	4 6 6	21,625 0 0	£ 820	£ s. d.	£ s. d.
2.—Carn Brea, Cost-book.....	Illogan, Cornwall.....	1832	Tin .....	944½	51,966 0 0	1-24th	6,000	9 7 11	56,375 0 0	308,500	1 5 0	7,500 0 0
3.—Dolcoath, Cost-book .....	Camborne, Cornwall.....	1799	Arsenic... Tin .....	1816 142 7 11	102,038 19 5 54,266 8 11	1-15th 1-20th	4,296	10 10 8	45,252 2 10	539,950	5 12 6	24,165 0 0
4.—East Pool, Cost Book.....	Illogan, Cornwall.....	—	Copper ... Tin stone .. Halvans .. Arsenic... Lead .....	654 — — — 600	1,975 7 8 5,651 6 6 2,176 4 6 1,400 0 0 5,472 10 0	1-15th	6,400	0 9 9	3,120 0 0	163,868	4 3 6	26,720 0 0
5.—Frongoch, Limited .....	Cardiganshire .....	1878	Blende ...	2350	6,672 10 0	1-20th	12,500	2 0 0	25,000 0 0	2,500	0 2 0	1,250 0 0
6.—Great Laxey, Limited*.....	Laxey Glen, Isle of Man.....	1863	Sil.-Lead. Blende ...	1600 7200	28,702 10 0 29,325 0 0	1-8th 1-20th	15,000	4 0 0	60,000 0 0	414,000	1 4 0	18,000 0 0
7.—Green Hurth, Lead, Limited ...	Durham .....	1864	Lead .....	860	8,517 8 1	1-10th	6,400	0 6 0	1,920 0 0	21,440	0 14 0	4,480 0 0
8.—Gunnislake (Clitters), Cost-book	Calstock, Cornwall .....	1858	Copper ...	2523	15,854 2 11	1-20th	10,240	2 2 0	21,504 0 0	9,088	0 3 0	1,536 0 0
9.—Lisburne, Limited .....	near Aberystwith .....	1834	Lead .....	910	9,830 0 0	1-14th	400	18 15 0	7,500 0 0	244,600	6 0 0	2,400 0 0
10.—Mellaneer, Copper, Limited.....	Hayle, Cornwall .....	1876	Copper ...	6811	21,437 12 4	1-24th	10,000	2 0 0	20,000 0 0	15,000	0 9 0	4,500 0 0
11.—Minera, Limited.....	near Wrexham, Denbigh.....	1850	Lead .....	1023	10,501 0 0	1-12th	9,000	5 0 0	45,000 0 0	614,556	0 3 0	1,350 0 0
12.—North Hendre Lead, Limited ...	near Mold, Flint .....	1870	Blende ...	5371	21,940 11 0	1-12th	11,854	2 10 0	29,635 0 0	45,335	0 5 0	3,975 10 0
13.—North Levant, Cost-book .....	St. Just, Cornwall.....	1850	Lead .....	1099	10,984 0 0	1-15th	8,146	1 5 0	10,182 10 0	9,600	0 3 0	300 0 0
14.—Penhalls, Cost book .....	St. Agnes, Cornwall.....	1856	Tin .....	64	3,377 3 1	1-24th	2,000	13 6 0	26,600 0 0	19,250	0 1 6	375 0 0
15.—Roman Gravels, Limited .....	Shropshire .....	1870	Tin .....	121	6,661 15 4	1-24th	5,000	3 17 6	19,375 0 0	105,900	0 10 0	6,000 0 0
16.—South Condurrow, Cost-book ...	Camborne, Cornwall.....	1865	Lead .....	2921	28,109 2 6	1-12th	12,000	7 10 0	90,000 0 0	52,182	0 16 0	4,898 8 0
17.—Tincroft, Cost-book .....	Illogan, Cornwall.....	1836	Blende ... Tin .....	60 457½	210 0 0 26,403 15 3	1-26th	6,000	6 5 6	38,421 16 6	265,500	0 15 0	4,500 0 0
18.—Van, Limited .....	Montgomeryshire .....	1869	Copper ... Tin .....	52 533½	203 14 9 28,856 0 0	1-14th	15,000	4 5 0	63,750 0 0	372,375	0 5 0	3,750 0 0
19.—West Basset, Cost-book.....	Illogan, Cornwall.....	—	Lead .....	2600	28,201 7 6	1-30th	6,000	6 15 0	40,500 0 0	167,100	1 0 0	6,000 0 0
20.—West Holway, Limited .....	near Holywell, Flint .....	1879	Blende ...	1314	3,227 12 6	1-14th	12,000	1 0 0	12,000 0 0	574	1 0 0	574 10 0
21.—Wheal Crebor, Cost-book .....	Tavistock, Devon .....	1858	Tin .....	847	44,148 0 0	1-15th	12,000	2 4 0	26,400 0 0	7,650	0 5 0	3,000 0 0
22.—Wheal Eliza, Cost-book.....	near St. Austell, Cornwall ...	1861	Copper ...	145	1,475 0 0	1-21st	1,024	18 0 0	18,432 0 0	51,712	8 0 0	8,192 0 0
23.—Wheal Grenville, Cost-book.....	Camborne, Cornwall.....	1855	Mundic... Tin .....	2877 524	9,262 3 5 31,019 8 3	1-30th	6,000	15 12 6	93,750 0 0	3,750	0 7 6	2,250 0 0
24.—Wh. Kitty (St. Agnes), Cost-book	St. Agnes, Cornwall.....	1852	Copper ...	32	172 16 10	1-24th	4,295	5 4 6	22,334 0 0	55,814	0 1 6	322 2 6
25.—Wheal Peavor, Cost-book .....	Redruth, Cornwall .....	1872	Tin .....	357½	21,116 5 9	1-20th	3,000	7 11 0	22,650 0 0	25,425	1 1 0	3,150 0 0
			do. leavings	388	20,594 0 0							
					1,477 0 0							
					£ 649,736 10 9				£ 890,326 9 4	£ 3,516,489		£ 139,508 10 6

\* Ore Sales from August, 1880, to August, 1881.

† Tonnage estimated, not given in official circulars, or supplied on compiler's request.

## BRITISH DIVIDEND MINES.—QUOTATIONS 1881.

Summary of ores sold as above:—				Name.	Price Jan. 1.	Lowest.		Highest.		Price Dec. 31.	Average prices compared with former years:—					
Tons.	Average.	Amount.	When.			Price.	When.	Price.	Black Tin.		Copper Ore.	Lead Ore.	Blende Ore.			
Black tin .....	7,225	£54 16 10	£396,251 12 4	Blue Hills .....	3½ 4	Dec. 31	2 2½	Apr. 2	3½ 4	2 2½	1876	£44 10 0	£5 0 6	£16 2 6	£3 13 6	
Copper ore.....	12,949	3 15 6	48,905 17 11	Carn Brea .....	17½ 18	Jan. 1	17½ 18	Oct. 22	29½ 30½	26 27	1877	41 15 0	4 7 0	13 1 3	3 15 0	
Lead ore.....	10,158	10 2 11	103,090 17 1	Dolcoath .....	56 58	June 25	55 56	Nov. 19	91 93	89 91	1878	35 12 6	4 7 0	10 13 0	3 9 9	
Silver-lead ore.	1,600	17 18 9	28,702 10 0	East Pool.....	33 37	Feb. 5	33 35	Dec. 31	45 47	45 47	1879	42 0 6	3 10 6	9 18 9	3 9 9	
Blende ore.....	16,295	3 15 3	61,375 13 6	Great Laxey .....	18½ 19½	Aug. 13	16½ 17½	Dec. 3	19 20	18 19	1880	52 2 1	3 11 0	11 6 9	4 6 4	
Sundries.....	—	—	11,410 8 11	Gunnislake .....	3½ 4	July 30	2½ 3	Feb. 12	4½ 5½	3½ 4	1881	54 16 10	3 15 6	10 2 11	3 15 3	
				Mellaneer .....	4½ 5	Sept. 10	4 4½	Apr. 2	5 5½	4½ 5						
				Minera .....	9 10	Sept. 3	8 9	Jan. 1	9 10	8 9						
				Penhalls .....	1½ 2½	Nov. 19	1 1½	Jan. 1	1½ 2½	1 1½						
				Roman Gravels ..	9½ 9½	Jan. 1	9½ 9½	May 28	13 14	10½ 11						
				South Condurrow..	10½ 11	Apr. 30	9 9½	Nov. 26	11 12	11 11½						
				Tincroft .....	20 22	July 30	15½ 16½	Jan. 8	21½ 22½	18 19						
				Van .....	15 17	Apr. 30	7 8	Jan. 1	15 17	8½ 9						
				West Basset.....	14 15	Feb. 19	12 13	June 11	16 17	15 15½						
				Wheal Crebor.....	4½ 4½	Nov. 12	2½ 2½	Jan. 1	4½ 4½	3½ 4						
				Wheal Grenville...	10½ 11	July 9	7½ 8½	Nov. 26	12 13	11½ 12						
				Wheal Kitty .....	4 4½	Jan. 1	4 4½	Dec. 31	½ ½	½ ½						
				Wheal Peavor.....	27 28	Dec. 31	11 12	Jan. 8	27 29	11 12						
Total .....											In 1876, Foreign Mines, 24 in number, paid.....					£613,326
In 1876, British Mines 29 in number, paid .....			£191,469								1877	"	19	"	516,520	
" 1877 " 31 " .....			173,771								1878	"	18	"	587,465	
" 1878 " 27 " .....			116,441								1879	"	17	"	493,568	
" 1879 " 16 " .....			99,002								1880	"	26	"	861,531	
" 1880 " 32 " .....			210,651								1881	"	24	"	929,658	
" 1881 " 25 " .....			139,508													

In 1876, British Mines 29 in number, paid ..... £191,469  
 " 1877 " 31 " ..... 173,771  
 " 1878 " 27 " ..... 116,441  
 " 1879 " 16 " ..... 99,002  
 " 1880 " 32 " ..... 210,651  
 " 1881 " 25 " ..... 139,508

In 1876, Foreign Mines, 24 in number, paid..... £613,326  
 1877 " 19 " ..... 516,520  
 1878 " 18 " ..... 587,465  
 1879 " 17 " ..... 493,568  
 1880 " 26 " ..... 861,531  
 1881 " 24 " ..... 929,658

## THE FOREIGN AND COLONIAL METALLIFEROUS DIVIDEND MINES OF 1881.

Title of Mining Company.	Situation of property.	Year formed.	For what worked.	Existing allotted capital.			Total amount divided in dividends.	Dividends declared in 1881.		Share quotations in 1881.									
				Shares.	Paid.	Total.		Per share.	Total.	Jan. 1.	Lowest.	When.	Highest.	When.	Dec. 31.				
1.—Alamillos, Limited .....	near Linares, Spain	1863	Lead .....	35,000	£.	£.	£.	£. s. d.	£. s.	1½	2	¾	1½	March 16	1½	2	Dec. 22	1½	1½
2.—Australian Mining, Limited...	Australia .....	1844	Sundries.....	18,315	7½	132,399	25,183	0 2 0	1,831 10	1½	1½	1	1	July 28	1½	1½	Dec. 23	1½	1½
3.—Birdseye Creek, Limited .....	California.....	1871	Gold .....	15,000	4	60,000	13,500	0 2 0	1,500 0	1½	2	1½	1½	May 28	1½	2	Aug. 27	1½	2
4.—Cape Copper, Limited .....	Cape of Good Hope	1863	Copper .....	20,000	7	140,000	858,125	0 4 0	80,000 0	41	43	41	43	Jan. 1	48	50	Dec. 10	46	48
5.—Copiapo, Limited .....	Copiapo, Chili.....	1830	Silver & Copper	47,500	37. 8s.	161,670	93,076	0 5 6	13,076 5	2	2½	2	2½	Jan. 1	3½	4	Dec. 24	3½	4
6.—Fortuna, Limited .....	near Linares, Spain	1854	Lead .....	25,000	2	50,000	200,208	0 3 9	4,687 10	5	6	3½	4	May 18	5	6	Jan. 1	4½	5
7.—Frontino and Bolivia, Limited	U.S. Colombia ...	1861	Gold .....	59,875	2	119,750	25,076	0 2 0	5,747 8	5	5½	3	3½	Sept. 24	5	5½	Jan. 1	3	3½
8.—Linares Lead, Limited .....	near Linares, Spain	1852	Lead .....	15,000	3	45,000	270,100	0 7 0	5,250 0	6	6½	4½	5	May 18	6½	7	March 8	5½	6½
9.—New Quebrada, Limited .....	Venezuela .....	1866	Copper .....	61,318	5	306,590	16,862	0 3 0	9,197 14	5½	5½	3½	4	Sept. 10	6½	6	Jan. 29	4½	5
10.—Panucillo, Limited.....	Chili .....	1864	Copper .....	50,000	4	200,000	41,875	0 7 6	18,750 0	5½	6½	4½	5	Sept. 17	6½	7	April 9	6½	6½
11.—Port Phillip, Limited.....	Clunes, Australia..	1852	Gold .....	97,500	1	97,500	180,375	0 0 8	3,250 0	4s.	6s.	4s.	6s.	Nov. 29	—	—	Jan. 1	—	—
12.—Richmond Consolidated Lim.	Eureka, Nevada ...	1871	Silver, &c. ...	54,000	5	270,000	700,517	3 0 0	162,000 0	16½	16½	12½	13	Dec. 31	18	18	April 23	12½	13
13.—Rio Tinto, Limited .....	Andalucia, Spain..	1873	Copper, &c. ...	325,000	10	3,250,000	427,500	1 0 0	225,000 0	18½	19½	18½	19½	Jan. 1	31	32	Dec. 31	31	32
14.—Santa Barbara, Limited .....	Minas Geraes, Brazil	1868	Gold .....	40,000	1	20,000	23,500	0 1 0	2,000 0	1½	2	1½	2	Jan. 1	1½	2	Jan. 1	1½	2
15.—Scottish Australian, Limited..	New South Wales .	1859	Various .....	120,000	1	120,000	234,382	0 2 0	16,000 0	2½	2½	1½	1½	June 24	2½	2½	Feb. 10	1½	1½
16.—Sierra Buttes, Limited .....	Sierra, California..	1870	Gold .....	80,000	1	40,000	241,423	0 2 6	15,312 10	1½	1½	1½	1½	Feb. 5	1½	1	April 9	1½	1½
17.—ditto (Plumas Eureka) .....	Plumas, California.	1872	Gold .....	140,625	2	281,250	260,155	0 6 0	42,187 10	2½	3	2½	2½	Feb. 5	2½	3	June 13	2½	3
18.—St. John del Rey, Limited ...	Minas Geraes, Brazil	1830	Gold .....	Stock. All		253,000	1,440,400	5 per cent.	12,650 0	235	255	175	185	Oct. 25	270	290	Jan. 26	205	215
19.—Tharsis Sulphur & Copper, L.	Andalucia, Spain ..	1866	Copper, &c. ...	91,896	10	918,960	2,402,679	25 per cent.	284,165 0	34½	35½	34½	35½	Jan. 1	47½	48½	Dec. 13	46	47
20.—Tolima, Limited .....	U.S. Colombia.....	1871	Gold .....	13,154	5	65,770	23,255*	0 9 9	5,700 1	—	—	—	—	—	—	—	3	4	
21.—Victoria (London) Limited ...	Australia .....	1860	Gold .....	6,000	1	30,000	—	0 0 10	—	—	—	—	—	—	—	—	—	—	
22.—West Prussian, Limited .....	Rhenish Prussia ...	1875	Lead, &c. ...	25,000	16s.	20,000	—	0 0 8	1871 5	—	—	—	—	—	—	—	—	—	
23.—Western Andes, Limited .....	U.S. Colombia.....	1872	Gold, &c. ....	14,050	10	210,000	42,208†	0 12 0	3,270 0	10	10½	9	10	Oct. 8	10	10½	Oct. 1	9	10
24.—Yorke Peninsula.....	Australia .....	1864	Copper .....	75,000	5	75,000	8,220‡	15 per cent.	8,220 0	—	—	—	—	—	—	—	—	—	
				54,800	1	54,800				½	½	1-16	3-16	June 24	½	½	Nov. 30	3-16	5-16
					£ 7,558,889		£ 7,653,782		£ 929,658 8										



## Registration of New Companies.

The following joint-stock companies have been duly registered:—

**THE PARAGON BRICK, TILE, AND CEMENT WORKS (Limited).**—Capital 20,000*l.*, in shares of 10*l.*. To carry on the business of brick, tile, cement, &c., manufacturers, at Bilton, near Rugby. The subscribers are—F. Snelling, Lambeth, 100; W. J. Steward, Junior, Carlton Club, 150; W. F. Songey, Highgate, 50; G. K. Pugh, Croydon, 100; J. Pinfold, Rugby, 50; E. A. Baytis, 6, Albany, 50; R. Pearce, Church-court, 25.

**THE ELECTRICAL TRADING COMPANY (Limited).**—Capital 10,000*l.*, in shares of 10*l.*. To establish and carry on a business of manufacturing apparatus or instruments in connection with electricity.

**JAMES ISAAC AND JOHN FUSSELL (Limited).**—Capital 12,000*l.*, in shares of 100*l.*. To acquire and continue an established business of mechanical engineers, tool makers, ironfounders, metal workers, &c. The subscribers (who take one share each) are—J. H. Fussell, Frome; M. F. J. W. Fussell, Frome; S. J. Fussell, Frome; R. H. Kekewich, 1, Mitre-court Buildings; L. P. Kekewich, 2, Lombard-court; E. V. Thompson, 9, Theobald's-road; J. Wright, 5, College Chambers.

**THE BRITISH HONDURAS AND CUBA SUBMARINE TELEGRAPH COMPANY (Limited).**—Capital 120,000*l.*, in shares of 10*l.*. To acquire the property, privileges, and effects of the Compagnie du Télégraph sous Marin and L'Amérique Centrale. The subscribers (who take one share each) are—C. W. Strouge, Regent's Park; M. de Zulereto, 41, Moorgate-street; B. M. de Zulereto, 41, Moorgate-street; J. M. de Zulereto, 41, Moorgate-street; R. C. Wyatt, 9, Fenchurch-street; C. J. Hill, Sydenham; J. F. Garrido, 1, Chipley-street.

**THE NARROW GAUGE RAILWAY COMPANY OF SICILY (Limited).**—Capital 200,000*l.*, in shares of 20*l.*. To construct, maintain, and work a railway from Palermo to Carleone. The subscribers (who take one share each) are—T. H. Grantham, Bromley; A. G. Moore, Leyton; G. Pinchbeck, 17, Ponsoby-place; W. G. Woodman, Brixton; C. J. Hodgson, 10, Wimbeldon Park-road; O. H. Howarth, 110, Cannon-street; J. H. Sevier, Victoria Mansions.

**ABER RHONDDA COLLIERY COMPANY (Limited).**—Capital 15,000*l.*, in shares of 10*l.*. To carry on the business of colliery proprietors, coke manufacturers and miners, and to adopt and carry into effect an agreement made between J. M. J. Williams and W. Davies of the one part, and F. S. N. Johnson on behalf of the company. To construct, maintain, and improve any waterworks, reservoirs, canals, railways, tramways, wharves, piers, docks, as may be required in the interests of the company. The subscribers (who take one share each) are—J. Corry, jun., Cardiff, shipowner; J. C. Oliver, Cardiff, dental surgeon; J. Sankey, Cardiff, merchant; T. Leonard, Cardiff, M.D.; W. Davies, Pontypridd, colliery proprietor; J. Morgan, Aberdare, colliery proprietor; F. S. N. Johnson, Cardiff, colliery agent. The number of directors must not exceed five or be less than three, the qualification being fixed at 25 shares.

**THE BRITISH-AMERICAN CO-OPERATIVE MINING ASSOCIATION (Limited).**—Capital 5000*l.*, in shares of 1*l.*. To purchase or otherwise acquire any lands, mines, lodes, veins, diggings, deposits, mining rights, quarries, works, &c., for the purpose of dealing with them in any way, or for carrying on mining, quarrying, or washing operations either in America or elsewhere, and to smelt, crush, refine, and dress the ores and minerals of the association, or of any other association or company, and to realise and deal with the products. The subscribers (who take one share each) are—W. R. Alexander Lamborne, Major-General; J. Hastings, Seymour-place, consulting engineer; G. L. Morton, Harlesden, secretary; A. J. Boulton, New Barnett, engineer; S. Vine, Aldershot, grocer; O. E. Woodhouse, 29, Upper Philimore Gardens, C.E.; F. L. Rawson, 68, Cornwall Gardens, engineer.

**GREAT NORTHERN ELECTRIC LIGHT COMPANY (Limited).**—Capital 10,000*l.*, in shares of 1*l.*. To light New Southgate and adjacent districts by means of electricity. The subscribers (who take one share each) are—H. E. Harris, 6, Finsbury Pavement; J. L. Whitmarsh, New Southgate; R. F. Patteris, Mile End-road; A. Jackson, 25, Liverpool-street; J. Garne, New Southgate; R. Hawkes, New Southgate; T. H. Jones, New Southgate.

**JOHN CHALLINOR AND COMPANY (Limited).**—Capital 60,000*l.*, in shares of 50*l.*. To acquire and continue a business of coal and ironmasters and makers of bricks, tiles, and other articles, at Fenton, near Stoke-upon-Trent. The subscribers are—W. Challinor, Leek, 150; J. Challinor, Leek, 200; C. S. Challinor, Stoke-upon-Trent, 350; J. Grimson, Great Fenton, 200; M. Lewthwaite, Milom, 5; T. Ashworth, Fenton, 10.

**THE GARSANT IRON AND TIN-PLATE COMPANY (Limited).**—Capital 30,000*l.*, in shares of 100*l.*. The manufacture and sale of iron, tins, and tin-plates, &c. The subscribers are—T. Thomas, Bettws, 2; D. John, Llanelly, 1; J. Samuel, Llanelly, 1; T. Evans, Brynammon, 5; G. Elias, Bettws, 5; J. H. Smyth, Brynammon, 2.

**THE HESKETH BANK, BRICK, AND TILE COMPANY (Limited).**—Capital 5000*l.*, in shares of 5*l.*. To take over and continue a brick and tile manufacturing business in Lancashire. The subscribers (who take 50 shares each) are—S. Boothroyd, Southport; E. Tildon, Southport; J. Witham, Southport; F. Fisher, Southport; J. Hatch, Southport; E. Holden, Shipley; T. H. Sherwood, Liverpool.

**THE LONDON AND WEST AFRICAN BANK (Limited).**—Capital 500,000*l.*, in shares of 10*l.*. To carry on a banking business in all branches. The subscribers (who take one share each) are—C. G. Rosenbach, New Exchange Buildings; G. Lund, 1, Queen Victoria-street; W. S. Mappin, West Dulwich; F. Bigg, 39A, Threadneedle-street; E. W. Henry, Hampstead; J. N. Harrington, 7, Albemarle-street; J. Clements, Lewisham; H. J. Maclean, 28, Theobald's-road.

**THE DURKHEIM SALT SPRINGS, MINERAL WATERS, BATHS, AND HOTEL COMPANY (Limited).**—Capital 35,700*l.*, in shares of 20*l.* and 1*l.*. To acquire and carry on mineral springs, baths, hotels, casinos, theatres, &c., in Germany. The subscribers are—Lord Headley, 7, Ashwood-road, 10; J. E. Hunter, 46, Lower Belgrave-street, 10; J. Fitz, Dürkheim, 10; E. Werly, Bannan, 10; H. Bischoff, Dürkheim, 10; L. Fitz, Dürkheim, 20; B. Pellegrini, Longueville, Metz, 10.

**MOUNTSTUART SHIPBUILDING, GRAVING DOCKS, AND ENGINEERING COMPANY (Limited).**—Capital 120,000*l.*, in shares of 50*l.*. To carry on at Cardiff and elsewhere in Glamorgan or Monmouth the trades of dock owners, shipbuilders, boiler makers, founders, engineers, &c. The subscribers are—J. R. Christie, Cardiff, 100; C. W. Christie, Cardiff, 50; W. H. Taylor, Whitby, 50; A. B. Telleson, Cardiff, 85; J. G. Marychurch, Cardiff, 50; W. Marychurch, Cardiff, 50; C. O. Young, Cardiff, 100.

**THE SOUTH SHIELDS SALT WATER BATHS COMPANY (Limited).**—Capital 5000*l.*, in shares of 1*l.*. Acquiring land for the foregoing business. The subscribers are—H. Nelson, Westoe, 50; H. Chapman, Westoe, 20; J. B. Hall, South Shields, 50; A. Allen, South Shields, 20; T. Mabane, South Shields, 20; G. R. Potts, South Shields, 20; R. Swainston, South Shields, 20.

**THE SOUTH STOCKTON IRON COMPANY (Limited).**—Capital 25,000*l.*, in shares of 25*l.*. To take over on lease, develop, and work the North Yorkshire Ironworks at South Stockton-upon-Tees, Yorkshire. The subscribers are—J. Richardson, Northallerton, 80; C. A. Head, Stockton, 20; W. Anderson, Stockton, 20; M. Robinson, South Stockton, 20; T. Wrighton, Stockton, 20; H. G. Spence, Stockton, 20; C. W. Littleboy, Stockton, 90.

**ORIGINAL HARTLEPOOL STEAM SHIPPING COMPANY (Limited).**—Capital, 75,000*l.*, in shares of 5*l.*. The business of a shipowner in all branches. The subscribers are—W. H. Richards, 36, Mark-lane, 50; J. Holland, 16, Coal Exchange, 50; J. A. Burton, Brockley, 50; E. Ayres, 31, Hyde Park-place, 50; W. J. Ford, Stroud, 50; J. W. H. Byrne, 14, St. Swithin's-lane, 50; H. J. Royle, 5, Bedford-row, 2.

**THE RADCLIFFE COAL COMPANY (Limited).**—Capital 20,000*l.*, in shares of 50*l.*. To carry out an arrangement for the purchase from a liquidating debtor the lease of certain coal mines, &c., within lands situated within the township of Amble, Hauxley, and Low Hall, in Togatog, parish of Warkworth, Northumberland, and to carry on all or any of the branches of the trades of colliery owners, miners, brick makers, manufacturers, and general contractors. The shareholders (who take two shares each) are—C. A. Hedley, Newcastle-upon-Tyne, agent; W. W. Smith, Newcastle-upon-Tyne, coal fitter;

T. W. Haggie, South Shields, rope manufacturer; P. S. Haggie, Westoe, rope manufacturer; J. N. Guy, Newcastle-upon-Tyne, engineer; A. G. Stavert, Newcastle-upon-Tyne, agent; J. P. Ponter, Newcastle-upon-Tyne, gent.

**CASTLE STEEL AND IRONWORKS COMPANY (Limited).** Capital 100,000*l.*, in shares of 10*l.*. To acquire and carry on an established business at Castle Pile, Milford Haven, Pembrokeshire. The subscribers (who take one share each) are—S. Lake, Milford Haven; H. A. E. Parnell, 22, Charing Cross; T. W. Taylor, 7, Victoria-street; E. J. S. Ford, 19, Barforth-road; W. T. Bothwell, Bow; W. E. Redmay, Milford Haven; A. E. Baldwin, Milford Haven.

**THE COLORADO MINES DEVELOPMENT COMPANY (Limited).**—Capital 21,000*l.*, in shares of 50*l.*. To develop and afterwards to purchase, lease, or otherwise acquire and work certain mines, minerals, and mining rights at South Mountain, Rio Grande county, State of Colorado, or elsewhere, also other properties suitable or not for mining purposes, and to sell, lease out, or otherwise dispose of the same. The subscribers are—P. Tarbutt, 46, Queen Victoria-street, C.E., 1; H. Herbert, Muckross, 10; A. J. H. Elliot, 36, Enismore Gardens, major-general, 10; A. Fell, 46, Queen Victoria-street, solicitor, 10; J. W. Dunn, Blackheath, no occupation, 10; C. Quentin, 46, Queen Victoria-street, secretary, 1; H. W. Lamb, Anerley, gent., 10. The members shall elect the directors in general meeting, and at least two shall be resident in England.

**ALLIANCE STEAMSHIP INSURANCE ASSOCIATION.**—The mutual insurance of steamships by members of the company. The subscribers are—W. Wilkie, Newcastle-upon-Tyne; W. Short, North Shields; E. Shotton, North Shields; P. Barron, North Shields; J. Wait, North Shields; James Wait, Newcastle-upon-Tyne; J. Canell, North Shields.

**THE INSULITE COMPANY (Limited).**—Capital, 20,000*l.*, in shares of 10*l.*. To manufacture, sell, and deal in materials connected with telegraphy, telephones, electric lighting, &c. The subscribers are—E. Easton, 11, Delahey-street, 50; H. Green, 93, Belgrave-road, 10; Duke of Sutherland, Stafford House, 20; A. K. Kemball, 79, Queen's Gate, 10; J. A. Fleming, Nottingham, 1; H. White, Hampstead, 50; M. M. Moore, 83, Lombard-street, 50; W. C. Jackson, 18, King-street, 10.

**THE UNIVERSAL MINERALS REDUCTION AND AMALGAMATING COMPANY (Limited).**—Capital 150,000*l.*, in shares of 1*l.*. To acquire certain patents and process for the treatment of auriferous and other ores, and to take over and develop the business of the Greenwich Ore Production Company (Limited), together with the works, stock, plant, machinery, effects, &c. The subscribers are—J. T. Cass, 12, Furnival's Inn, 1000; T. Orchard, 139A, Alexandra-road, 500; N. D. Garrett, 121, Bishopsgate-street, 1000; F. E. D. Bédal, Dublin, 1000; S. L. McAlpine, 94, Southwark-street, 1000; G. A. Pitts, Brixton, 500; H. J. Leslie, 4, Coleman-street, 100.

## Meetings of Public Companies.

## THE FRONTINO AND BOLIVIA (SOUTH AMERICAN) GOLD MINING COMPANY.

A special general meeting of shareholders was held at the Cannon-street Hotel yesterday.—Mr. THOMAS EYRE FOAKES in the chair—for the purpose of passing the following resolution, or any amendment thereof:—"That the capital of the company be increased by the issue of 10,000 ordinary shares of the company of 1*l.* each."

The CHAIRMAN said that at the last meeting the directors stated what they considered would be the proper course to adopt with respect to this capital, and that was that they should issue 10,000 ordinary shares, and that those shares should be issued at 10*s.* per share premium. Since then the board had under consideration the question how they should recommend that this capital be disposed of, and this was what they proposed. The 10,000 ordinary shares if issued at 10*s.* per share premium would give 25,000*l.*. About 6000*l.* to repay the revenue account the amount which had been spent on capital account since June last, and that would provide the shareholders with a dividend of 2*s.* per share. They proposed that 8000*l.* should be appropriated to the purchase money of the Cordoba and Garibaldi properties, and a further 2000*l.* to the development of the Cordoba property, and 3000*l.* to the development of the Garibaldi property; and there was also a feeling that 7000*l.* should be appropriated in further utilising the Pucón water by erecting more mills and water-wheels. He and his colleagues agreed with him, and would have been glad not to have appropriated any portion of this capital towards the payment of a 2*s.* dividend; but at the same time he could not forget that the shareholders had had to wait for a considerable time for dividends, and therefore the directors had agreed to the arrangement. Another proposition had been put forth by a number of shareholders that the shares should be issued at par. He noticed yesterday that the shares were selling at 3*s.* per share (which was 1*l.* premium). Some time ago he was told by people who were largely connected with banking in South America, and who knew the property, that they would be prepared to take up 30,000*l.* of the capital at 10*s.* per share premium; but his reply was that he did not think the shareholders would like the property to go out of their own hands, and that the shareholders must have the offer of taking the shares ratably amongst them. The people to whom he alluded also stated further that if the shareholders did not take all the shares they would take the balance not taken up. If this proposition involved a question of principle, and the shareholders did not agree to the proposition, the directors could place their resignation in the hands of the shareholders; but it did not involve a question of principle as to whether they put the 6000*l.* in their pockets in the shape of dividend, or whether they issued the shares to the shareholders ratably at par. He thought the best course would be to pay the 2*s.* dividend, and he believed it would give a better tone to the property, as it would show that the thing was a dividend-paying concern. Of course if they issued the shares at par the 6000*l.* would not be repaid as dividend; but, at the same time, if the shareholders liked, they could create enough to pay themselves a dividend of 6000*l.*, and issue the shares at par, but that would be bad policy. A good deal was said at the last meeting about what some of the shareholders considered the large expenditure at the mine on developments. After the meeting he wrote to Mr. Robert White, on behalf of the board, on the subject, and suggested to Mr. White that it would be well to give detailed statements of the works on which the money to be placed at his disposal was to be expended. They had also suggested to Mr. Robert White that it would be advisable for him to come home and meet the shareholders, and probably he would arrive in this country shortly. In Mr. Robert White they had gentlemen of the highest property and of the highest intelligence. He referred to the condition of the company at the time when Mr. Robert White went over to the property, and compared it with its present condition, and said that the shareholders were very much indebted to Mr. Robert White, and also his brother, Mr. Franklin White, for the great services which they had rendered to the company. He alluded to the great difficulty which was always experienced in finding able and trustworthy men to take charge of foreign mines. He was greatly impressed with Mr. White's intelligence and good sense, and he believed they would never find a man to do more justice to the property. Of course mining was always a speculation; but the question which they must look at was whether the mine was being properly and thoroughly developed and the works going on satisfactorily. He went on to refer to certain circulars which had been issued by certain shareholders, and said it was a misstatement to state, as was stated in one of the circulars, that by the adoption of the report to the 30th June last 22,000*l.* to the credit of profit and loss, which honestly belonged to dividend, had been confiscated for the benefit of the future. He complained that by such misstatements as this the gentlemen signing the circulars had obtained proxies from some of the shareholders. He also said there was a further misstatement in the circular regarding the acreage of the property, and said that Mr. White had ascertained the boundaries, which in many foreign properties were somewhat undefined. He referred to the many difficulties which the company had had to contend in consequence of its not having been very fortunate in the selection of some of its earlier employees both at the mines and in this country, and in passing referred to the careful and able manner in which Mr. Truman, the present secretary, discharged the duties of the office. He mentioned that the Cordoba Mine was now producing returns which in all probability would produce 500*l.* to 600*l.* per month upon the purchase money of 4800*l.*, as they would get the purchase money back in less than twelve months. Mr. White had purchased the Pucón Waterworks at a very cheap rate, and these were of very great value to the company.

Mr. SEAL contended that the 22,000*l.* which was referred to in the circular had not at all intents and purposes been confiscated, because the money should have been put to dividend. He denied that he or the gentlemen with whom he was acting had ever said a word against Mr. White, but what they objected to was Mr. White incurring such a large expenditure without sending more details, and without fuller instructions for the board in London. He thought that further details should also be given by Mr. White before any further large expenditure was sanctioned. He thought the shares should be issued at par; the payment of the 2*s.* per share was simply absurd and unbusiness-like, as it was really paying back to themselves money which they paid on the new capital. He said there was a difference of 4474*l.* between the monthly produce stated in the monthly reports and the amounts shown in the half-yearly report. He suggested that one or two gentlemen from the body of shareholders should be added to the board.

The CHAIRMAN, in reply to Mr. Edwards, said he had never speculated in the shares of the company, but he had always bought shares for investment, and whenever he had had occasion to sell any shares he had always done so with regret. The board would limit Mr. White to a certain expenditure, and would have details. As regarded the apparent discrepancy between the monthly reports and the half-yearly reports, that was easily explained by the fact that the gold had not quite come up to the price per ounce at which it was valued in the monthly reports, and there was also expenses for freight, &c. In future the gold would be taken at a somewhat less value per ounce in the monthly reports, so

that in future the discrepancy between the monthly reports and the half-yearly reports would be less, if there were any discrepancy at all.

The CHAIRMAN, in reply to a further question, said that Mr. Baxter, one of the directors, was of opinion that the expenses were too high, but this was a question which was reserved for the consideration of the board.

A discussion ensued, in the course of which some of the shareholders expressed the opinion that the shares should be issued at par.

The CHAIRMAN said it was a matter for the shareholders to consider, and in order to test the feeling of the meeting proposed that the capital of the company be increased by the issue of 10,000 ordinary shares of the company of 2*l.* each at par. He added that, of course, they will be issued *pro rata* to the shareholders, in the proportion of one share to every six existing shares.

Mr. DRUMMOND seconded the motion.

Mr. DONAGAY moved as an amendment that the capital be increased by the issue of 12,000 ordinary shares of 2*l.* each at par, which would give one share to every existing share.—Mr. SUTHERLAND seconded the amendment.

Several shareholders expressed their approval of this proposition, and the CHAIRMAN said it was a matter wholly in the hands of the directors.

The amendment was then put and carried.

Some conversation ensued with reference to the suggestion of Mr. Seal that one or two shareholders should be placed on the board, but no resolution was come to, as it was a question which could not be legally dealt with at this meeting.

A vote of thanks to the Chairman and directors closed the proceedings.

## DEVALA PROVIDENT GOLD MINING COMPANY.

The adjourned meeting of shareholders was held at the Cannon-street Hotel on Thursday.—On the motion of a shareholder Mr. J. M. KLENCK was voted to the chair.

The CHAIRMAN: Gentlemen, the result of last meeting was this: That after a very lengthened discussion relative to the committee's report, the directors placed their resignation in the hands of the meeting, and the meeting accepted that resignation, and the meeting was asked to act until the meeting was convened to elect the new board. The committee have had many meetings, but they have not legislated upon any matter connected with the company, but preferred to leave it to the new board which you will elect to-day; they have not touched a shilling nor pledged your credit, but leave the board perfectly free to take up matters at the place where the old board left off. With respect to a new board, we have had the greatest possible difficulty in obtaining the consent of gentlemen to represent you. We have applied in a number of instances to shareholders to allow themselves to be put forward in nomination, but we have had so many disappointing replies that it was at one time thought we should not be able to obtain gentlemen suitable in independence and position to represent you. But we have the names of some gentlemen to submit to you, and we trust they will meet with your approval.

Mr. PRISTON said that Mr. J. L. Montifore, the holder of 1000 shares, Mr. Francis Cobbe, the holder of 100 shares, and Mr. Hugh Watt, the holder of 120 shares, had signified their willingness to act upon the board, and form part of a new board. But there must be at least four gentlemen on the board, so those three gentlemen would not suffice; therefore he suggested that Mr. J. M. Klenck, a holder of 100 shares, and Mr. F. Probert, the holder of 100 shares, two of the members of the committee, should be also elected directors, believing it would be of great advantage to the company if they would join the board. He, therefore, moved that the following gentlemen be elected the directors of the company in the place of the gentlemen who had resigned—Messrs. J. L. Montifore, Francis Cobbe, Hugh Watt, J. M. Klenck, and F. Probert.

Mr. J. G. MONTIFORE seconded the motion.

Mr. HENDERSON contended that at the present meeting the committee could only suggest the names of gentlemen as directors, and the shareholders could not elect those gentlemen, but that a meeting must be called for that purpose. This was an adjourned meeting; it was impossible to legally elect directors at the first meeting, and, therefore, it could not be legally done at the adjourned meeting.

Mr. J. L. MONTIFORE said he would not consent to be a director unless he were re-elected unanimously. He had no wish to be a director, but if he were elected that course he would, under the present emergency, pursue. It would clearly be unwise to do anything beyond keeping on the property without working it for some little time to come. Let their neighbours work and strike oil, and when they had struck oil this company would have the benefit of their experience. (Hear, hear.) He also considered that every liability of the company should be paid off, in view of any resolution to immediately cease work. He would call upon the shareholders, who had not paid up their shares, to the extent of 1*s.* 6*d.* per share, and return the difference of 3*s.* 6*d.* per share to those shareholders who had paid up. (Hear, hear.) He would leave no money in hand for the directors to play with, but only just sufficient to continue the legal status of the company. (Hear, hear.)

Mr. ROBINS, solicitor to the company, said he thought it would not be legal to elect directors to-day, but a general meeting could be called, at which it could be done. He endorsed the views of Mr. Montifore relative to the conduct of the business in future.

Mr. HENDERSON said he was the more anxious that the election should not take place at the present meeting, but that they should have time to consider, because he believed the committee had invited their own friends to become directors.

Mr. PRISTON said there was not a word of truth in the statement. With the exception of one gentleman, he was a stranger to all the gentlemen proposed as directors.

Mr. WATT said he would consent to act as a director on the understanding that the board were not to receive any remuneration. He agreed with the policy of waiting to see the result of the working of the neighbouring company.

Mr. PRISTON said it was very necessary to elect gentlemen to carry on the business. As to the committee selecting their own friends, such was not the case, and, as a matter of fact, there had been the greatest difficulty in obtaining gentlemen to act on the board, though between 25 to 30 shareholders were applied to. He fully endorsed the sentiments of Mr. Montifore.

Some further discussion ensued, and there seemed a general feeling that it would be better to have a further meeting to elect directors, and in the end a resolution was passed adding Mr. J. L. Montifore and Hugh Watt to the committee, and requesting the committee to call an extraordinary meeting for the purpose of electing directors.

Mr. F. W. WILSON asked whether there was any action pending against the company.—Mr. ROBINS said there was one, which was instituted before the long vacation.

The CHAIRMAN said there was no record of this in the books, and this was another instance of the *buches* of the late board.

A vote of thanks to the Chairman and committee closed the proceedings.

## GAWTON MINING COMPANY.

The ordinary general meeting of shareholders was held at the offices of the company, Austin Friars, on Thursday.

Mr. GEORGE BATTERS in the chair.

The notice convening the meeting was read by Mr. EDWIN F. COLMER.

The CHAIRMAN said: Gentlemen, in consequence of the very serious illness of our secretary, Mr. Hickey, I regret that we are unable to present to you the balance-sheet which we should like to have laid before you prior to your meeting, under the circumstances I would suggest that, as we have a large meeting, and both Mr. Bawden and Capt. Rowe are present, we should proceed as if the accounts were before us, and after hearing what we have to say you should adjourn the meeting for the presentation of the accounts, in order that the directors may have them printed, and with their report may have them placed in your hands before the date of the adjourned meeting, which I propose should be in about 14 days from the present time. The statement which I have to make to you is this: That this company was registered as a Limited Liability company a little over 12 months ago, and that this is the first annual meeting. The object of registering the company was to provide the means for carrying on the work in hand, and a small amount of capital was called up wherewith to erect arsenical furnaces, and for the purpose of carrying out various modern improvements which were suggested by your agent and by your purser; and these objects have so far been attained that two of the furnaces were lit early in September last. It required about a month or six weeks to dry these before the turning of the one could be commenced, and the business of arsenical manufacture actually began in the beginning of November, with two furnaces, and two other furnaces were lit in the beginning of January, so that four furnaces have been in blast a little over a month—that is to say, for November and December you had about half your burning or manufacturing powers at work in a small way, and from the beginning of the year you have had the whole of your present means of manufacture in operation. During that time the furnaces have produced about 200 tons of arsenical soot, which have been sold and the money received for the same, while there is a large amount of arsenical soot now in the fuel. We have sold all that we can produce for the year at a better price than we began selling at; indeed, at a very good and very satisfactory price. (Hear, hear.) So far as the mine is concerned, it is reported upon by Captain Rowe as being worth 20 tons of arsenical muddle per fathom in several places; and, altogether, apart from the percentage of copper, I think we can say that no mine in the kingdom can show such courses of arsenical muddle—(hear, hear)—and that we have only to introduce rock-drills and vigorous working, and to put up a few additional furnaces, to produce almost any reasonable amount of arsenic. (Hear, hear.) In producing this arsenic we do not in any way reduce the value of our copper products. Our ores were selling two or three years ago at 12*s.* 6*d.* per ton. After burning, the same stuff has lately been sold at 1*l.* 13*s.* per ton.

Mr. M. BAWDEN: We have sold the residuum at 1*l.* 13*s.* per ton.

The CHAIRMAN: That shows that this manufacture of arsenic is not a bad business to be entered on. The work done has been accomplished for a very small amount of money. As you are aware, the capital is only 12,000 shares of 2*l.* each, of which 2*s.* per share has yet to be called up, and with this small capital you have erected works that will compare favourably with any of the kind in the kingdom. (Hear, hear.) From the base of the hill, where your chimney is erected, to the summit the height is 600 ft., and the height of the chimney beyond that is 102 ft., making 702 ft. in all, and the length of the flues already erected is 6000 ft., so that you can imagine what an immense amount of masonry and other work has been done. The chimney at the base is about 18 ft. in diameter, while the thickness of the masonry at the bottom is about 12 ft. You will, therefore, understand that this is a very substantial and a very big business. (Hear, hear.) Commercially speaking, if we can return 100 tons of arsenical muddle a month, which Captain Rowe tells us he will probably be able to do when the furnaces run continuously, that can be effected for about 100*l.*, which would realise upwards of 300*l.* a month. Then at a low estimate



that would give us 200 tons of poor copper—that is the burnt ore—a month, which would realise (say) 30s. a ton, or 300l. a month. But let us put it at 700l. a month as the total yield, and, covering the dues and everything else, we ought to work at a cost certainly not exceeding 400l.; in other words we should be making a very good profit, even on the moderate calculation I have given you. You must remember that you had spent nearly all your money before you came into the company, but even the whole amount which has been spent on the property is a very small sum, and if you get anything like Captain Rowe's forecast you shall have very handsome profits. (Hear.)

Captain Rowe read the following report:—

Feb. 14.—We beg leave to hand you our report of our mining property for the general meeting to be held on the 16th inst., which is as follows: Since the last general meeting the principal operations of the mine at surface have been very extensively conducted in excavating ground and erecting a new arsenic works, suitable for the manufacture of crude arsenic, and also four large reverberatory furnaces and flues, including a very extensive run of chambers, with flues 2000 ft. in length, and a large stack, 102 ft. high, suitable for the reception of the present requirements of crude arsenic, and also for any future additions that will be required to carry out the works more extensively in the process of refining the arsenic, which is very important in our continual success, by obtaining the current market price of 8l. per ton, and is likely to improve. Our present works also include very extensive buildings and sheds for the protection of the works and storage of the products of both arsenic and copper, of which we have, in this short space of time, treated about 500 tons of minerals, and sampled and sold 334 tons of copper ore, and extracted about 150 tons of arsenic, realising nearly 1470l., including 102 tons of burnt ore to be sold on the 23rd inst. Our engines and boilers have been thoroughly surveyed and repaired at some considerable expense, and are now in good working condition. For increased economy our present requirements are a substantial Blake's patent and improved stone breaker and suitable appliances to work it, with a new tram-road laid from the crusher house to the arsenic furnaces, and at the earliest possible convenience erect the new arsenic refinery, &c., which will probably incur an outlay of about 1000l. The principal underground development has been the confinement to the drainage of the 117, 105, and 95 ft. levels east. The two deeper levels have passed through profitable ore ground for some considerable distance, varying in value and quantity from 8 tons to 20 tons of arsenic muddle and copper ore per fathom, which is the present value of the lode in the ends. We have just started a new winze in the bottom of the 105 ft. level, to communicate with the 117, which is down 3 fms. below the level, where the lode is worth 15l. per fathom and showing indications of improvement. We have also a great quantity of valuable stoping ground in the back of the 105, where we purpose putting up rises, and cut up the ground in proper sections of stoping away with the most possible economy. In the 70 ft. level, and in different parts of the former workings throughout the mine, where the lode is most productive for arsenic muddle alone. At the same time we are inclined to think that the aggregate quantity and value of this class of mineral (arsenic and copper) will defy calculation, although we consider to have over 1000 tons of stuff for treatment already broken in the mine and on the floors. Consequently we advise the necessity of keeping the furnaces continually going, and not left idle for clearing out the arsenic chambers, as it is now. But in order to effect this improvement a short run of flues will be required in addition to the flues we now have, and perhaps some new chambers annexed. When the proposed work is accomplished, including the refining process of arsenic, with adequate machinery attached, there will be no reason to doubt making your property a large and profitable investment.—G. ROWE, G. ROWE, Jun.

The CHAIRMAN: How was the mine looking when you left?—Capt. Rowe: Just about the same as it is described in my report. The end is worth 20 tons per fm. Mr. CRIPPER said he had known the mine for 15 or 20 years, and he believed that it had a great future before it. The mode by which they were now treating the arsenic pyrites would enable them to return large profits, and he considered that the price of their shares was wholly inadequate to represent their actual value. (Hear, hear.)

The CHAIRMAN: We have an excellent market prospect and an excellent mining prospect, and if the business is only carried on with a reasonable amount of commercial prudence we shall have very fair returns. (Hear, hear.) I think that having waited so long, the shareholders are entitled to something. I was asked to suggest how money could be raised, and I recommended that the company should be registered under the Limited Liability Acts, and that you should find the money yourselves. I may state that the conversion was effected at a cost of about 50l., including stamps and law expenses. I think we have excellent prospects of meeting in a few months time, and talking about dividing profits. (Hear, hear.) Mr. Bowden's knowledge of the mine, and his position as a shareholder, value to the company. We know that the labourer is worthy of his hire, but Mr. Bowden has laboured very hard with very little pay for all that he has done. (Cheers.) I may add that everything has been done with the greatest economy, and that the work has been pushed forward with all the rapidity possible.

A short conversation ensued, and on the motion of the CHAIRMAN, seconded by Mr. HUNTER, it was decided to adjourn the meeting until the 2nd of March for the presentation of the accounts.

Votes of thanks were passed to the Chairman, to Capt. Rowe, and to Mr. Bowden, and the proceedings then closed.

[For remainder of Meetings see this day's Supplement.]

#### EAST WHEAL ROSE (LIMITED).

Old Jerry, Feb. 1.—Since the issue of the last special monthly report my directors have to report very satisfactory progress. The discovery of Innes' lode has been a fortunate one for the company, and the rich silver-lead which is now being daily raised from it is causing considerable excitement. The lode extends in new or unworked ground for about 600 fms. on the run of the lode, by about 40 fms. in depth, all above adit, thus being independent altogether of pumping machinery. Three stopes are already opened, and a sample of the silver-lead ore from the lode can be seen at the offices of the company.—Penrose's Shaft: The erection of the 90-in. engine at Penrose's shaft is proceeding as rapidly as possible. The boiler is also in course of fitting, and as piping and outfit have all been delivered, Messrs. Loam and Son inform the board that the whole will be completed without delay.—North Wheal Rose: The engine-house for the 100-in. engine is completed, and the stack commenced. The foundations for the boiler-house and capstan loadings are being prepared. It will be as gratifying to the shareholders as it is to the directors to find that the mines are re-opened and developed, even more than the prospects estimated in the prospectus are being realised. And it is a further satisfaction to the board to know that the additional evidence of the value of the property laid before the directors upon their visit of enquiry and inspection, previous to the payment of any portion of the purchase consideration, is each week being proved to have been absolutely reliable. In conclusion, my directors desire me to say that except in the unavoidable delay in the delivery of the heavier portions of the machinery, the board have no reason to complain of the progress of the mines. On the contrary, that with the yield of good paying ore from Innes' lode, increasing daily, the prospects of the company (quite independent of the large amount of ore which will be raised from Middleton's, and all the other lodes, as soon as the pumping commences) are exceedingly bright. After the last call of 2s. 6d. per share has been made it is the opinion of the board to apply to the Committee of the Stock Exchange for the official quotation.—F. HUTLEY, Secretary.

EAST WHEAL ROSE (LIMITED).—Feb. 6: Penrose: The five boilers for the 90-in. engine are delivered on the mine, four of which are got into the boiler-house, and the fifth will be got in this week. The bob of this engine is put together, and lifted into its place, also the larger granite stones for cylinder-bed are fixed, and holes bored for holding down bolts of cylinder. The cylinder, case and bottom are delivered, and the latter put into the engine-house, and its being fixed. In the meantime the case and cylinder are being put together outside. The steam capstan is also delivered, and all the necessary piping and outfit are on the loading, and is being put together. You will observe the engineers are working at three different points, Penrose's and North Wheal Rose shaftmen with four labourers assisting them. The capstan shears are built and ready to lift, waiting for the pulleys to be delivered from the foundry. We have built a house for storing powder during the past fortnight, which is completed.—Green's Dressing Machinery: This is being pushed forward with all speed. The mason's carpenters, and labourers, are very busy in their various departments on this part of the works. We have made a new cart road into the mine, the one previously used being so rugged and stiff, having had great difficulty in getting into the mine with heavy weights and long timber. The new road very materially lessens this difficulty. Innes' lode at the adit level continues to open out well. No. 1 stope is worth for silver-lead and blende 30 cwt. per fathom. No. 2 stope is worth for silver-lead and blende 10 cwt. per fathom. No. 3 stope is improving, the western part of which is worth 15 cwt. of silver-lead and blende per fathom; the eastern part is not so good, but we think the ore in the west end will lengthen through the whole stope, the average value of this stope at present is 8 cwt. of silver-lead ore and blende per fathom. Middleton's lode continues much the same as last reported, both in size and composition. I am pleased to say we have drawn a splendid pile of work to surface from Innes' lode, and can be seen by any shareholder who wishes to visit the mine.—North Wheal Rose: The engine-house for the 100-in. engine is completed, and is ready for the reception of the engine. Some of the masons are now building the stack, others are putting up a small house, which we shall at first use as a smith shop for this end of this mine, which will effect a considerable saving in carriage to and from shop on south mine, whilst the 100-in. engine is being fixed, after which it will be suitable for a changing house for shaftmen. We are getting a quantity of building stone from old building here, which would not do for the engine-house, but can be used for stack, boiler-house, &c. This will effect a saving in carriage, which has been very heavy during the winter months, not only in first cost in carriage of stone, but also in continued cost of repairing the road for transit.—THOS. DODGE.

#### MOUNTS BAY CONSOLS (LIMITED).

Old Jerry, Feb. 8.—As will be seen in Capt. Argall's special monthly report sent you herewith, the work of mining at Trebarvah is progressing well. In addition to the sales of tin being made, a parcel of copper was sampled on Jan. 23, and was to be sold on Feb. 2, and a further parcel of copper is being dressed ready to be sampled. At Sydney Cove the pumping-engine is now at work in full swing, and is doing its work well. It will be remembered that the agents of the company were fortunate enough, a short time since, to discover a rich lode of tin near to the surface, which was named Brown's lode. As soon as the water is forked down to the 12 (and this will take but a short time) it is intended to drive a short cross-cut—about 15 fms.—to intersect Brown's lode, the ore from which was valued at the surface at 60 lbs. tin to the ton of stuff. The whole of this lode is in virgin ground and traverses the sett from one end to the other. As the shareholders are aware the Great Wheal Vor lode runs through the Sydney Cove property, intersecting the majority of the copper lodes in the sett. At Penbrok work is proceeding favourably, and the engine and other machinery being erected as fast as the delivery of the larger portions will permit. The directors consider that the shareholders and themselves are to be congratulated upon the prospects in this mining property, the more so that the existence of rich lodes over and above those mentioned in the prospectus is being proved continually, and they would be gratified if shareholders would themselves, from time to time, visit the mines.—F. HUTLEY, Secretary.

MOUNTS BAY CONSOLS (LIMITED).—Trebarvah, Jan. 23: This month we have sunk the engine-shaft 1 fm. 2 ft.; the shaft is now down 5 fms. 5 ft. below the 50, sinking by nine men at 20l. per fathom. A fortnight since a slide came

into the shaft, and are just getting clear of it. There is a branch coming in from the south, which we think will drop in with the lode in a few feet of sinking, and which we hope will act as a feeder to it. The 50, west of engine-shaft, has been driven 4 fms., and we have reset the driving to four men at 4l. 15s. per fathom. The lode here is a little out more water, and we shall soon be getting under the overground in the levels above. We have commenced to drive a cross-cut at this level south; there are two ore three reported lodes untouched in this direction. The 40, west of engine-shaft, has been driven 4 fms.; we have reset to 4 men at 3l. per fathom. The lode is 1½ ft. wide composed of white spar quartz and pyrites. We have set the 62, west of Richard's shaft to six men at 6l. 15s. per fathom. The lode is 1 ft. wide, worth 3l. per fathom. The 62, east of Richard's is set to two men at 5l. 15s. per fathom. The lode is worth 4l. per fathom. We have set to two men to sink winze on the overground below the 57 at 5l. per fathom. When this winze is sunk to the 62, and the western level holed to it we shall be opening up stoping ground. The 50, east of Richard's shaft, has been driven 1 fm. 2 ft.; it has been reset to two men at 6l. per fathom. The lode is 1 ft., composed of quartz, blende, arsenical pyrites, and spots of copper ore. The 40, west of Richard's shaft, to hole to No. 1 stope has been driven 3 fms. This has been reset to two men at 4l. 15s. per fathom. In a few feet of driving more, we hope to hole to this stope. The lode is worth 3l. per fathom. In the back of this level we have two men on tribute at 15s. in 12. Four men are working on the North lode on tribute for tin at 18s. in 12. We sampled a parcel of copper ore on Jan. 23, which will be sold on Feb. 2, and we have commenced to dress another parcel. The crusher has been brought on the mine, and the work for the jigger from the foundry. The machinery throughout the mine is working fairly well.—Sydney Cove: We are driving the western cross-cut by two men at 2l. per fathom. In the country we are meeting with small branches containing blende and copper ore. During the past month we have made a pond, and put in over 100 fms. of laundries to bring in water for condensing purposes. The bobs and flat-rods are complete. Engine-house has also been covered in, and the masons have completed boiler house walls, which is now in course of covering in also. All surface operations are very forward. Some more work for the engine was sent from Hayle Foundry last evening, and we hope to beat work next week.—Penbro: We are driving on No. 7 lode at 30s. per fathom; the lode is 2 ft. wide composed of quartz and pyrites. The masons have finished the bob pit, and are now building the loading for the whim-engine. The engineers have fixed the boiler, and are making fair progress in erecting the engine. In the engine-shaft we have put in cistern at the adit level, and commenced to fix lift at the level. The carpenters are fixing the shaft balance bob after which we shall proceed with the capstan, shears, and other surface erections.—W. ARGALL, JOHN JAMES, JOHN ROWE.

Feb. 2: Sydney Cove engine, I am pleased to say, went to work yesterday in good style. I trust we shall now have good speed, and soon get the water out. I am glad to say the winze below the 57 at Trebarvah is worth 8l. per fathom.—W. ARGALL.

#### OLD SHEPHERDS MINES (LIMITED).

Old Jerry, Feb. 2.—Considerable progress has been made in clearing the adit and shafts since the issue of last month's special report.—North Shepherds: For the information of the shareholders, it may be well to state that the main adit has been cleared, in all, for some 600 fms., and large quantities of water has been let down. Upwards of 200 fms. have been sunk in adit shaft; and as evidence of the good state of the south shaft, a line has been dropped down it for between 30 and 40 fms. In the western part of the adit, the directors are assured that there does exist a better piece of ground in any lead district in the county of Cornwall. This work of clearing the adits and shafts in large mines such as Old Shepherds—has been so long idle—a tedious, and expensive operation; but the good results of it will be manifested as soon as the machinery gets to work. The board have every reason to feel sanguine of success; in fact, as the mines are re-opened, evidence is already given of even better prospects than were claimed for the property at the time of its sale to the company.

OLD SHEPHERDS MINES (LIMITED).—Feb. 6: South Mine: In presenting our monthly report we are glad to inform you that our progress has been most satisfactory. We have pushed on our work with all the rapidity possible, and we are now pushing on towards No. 20 adit shaft with a full staff of men. Also a pair of men cleaning and securing adit shaft which is now down 6 fms. 5 ft. This will be of great importance in communicating with the adit for ventilation, and to facilitate our progress in completing the adit to Harvey's engine-shaft, which we think will be done in a few weeks. The engineers have fixed the main bob in its exact place, also the four boilers, condensing cistern, granite for cylinder bed and cylinder bottom, and to-day will proceed in getting in the 80-in. cylinder. The heaviest works having been done, we expect greater progress to be made.—North Mine: There has been no change in clearing the adit west of the shaft, but we have every reason to believe the lode in different places above this level has been worked away by tributaries, which speaks well for the future of the mine, as there appears to be nothing done below the adit in this part. We are still pushing on the sinking of the new engine-shaft, which is now down 7 fms. 4 ft. below the surface, having a quantity of quarry stone carried on the spot, we are now in a position to commence building the house for the 70-in. engine, which we shall do forthwith.—Western Ground: We find the water still very powerful, notwithstanding the fixing of a larger lift of pumps. The levels were drained on the 23rd ult., when the water was let down, and the lode looks very promising, particularly in the western end on the north lode, and the eastern end on the south lode. These levels being 16 fms. below surface we consider a fair trial depth, and judging from north lode in the western end where we have just broken some splendid lead ore from the back of the level, we have no doubt we are close to a rich bunch of lead ore, which we shall have to report on more fully in a few days. In sinking the trial shaft at the junction of the two lodes we have a quantity of water, but as we are only 6 fms. deep, we are anxious to see them a little deeper, seeing it now presents so favourable an appearance.—RICHARD and J. NANCARROW.

#### TRESAVEAN MINES (LIMITED).

Old Jerry, Feb. 8.—In forwarding the special monthly report for January, from Capt. Josiah James, my directors desire me to express the satisfaction it affords them to be able to announce that the raising of tinstuff from Wheal Boys shaft has commenced, and with very satisfactory results. The lode (Caddy's lode) varies from 6 ft. to 12 ft. in width. Eight fair samples of tinstuff, taken and assayed at different levels down to the deep adit, have averaged 50 lbs. to the ton of stuff—equal to 20l. per fathom. This lode is above adit, and is of itself a mine, and capable of making large returns, and paying good dividends, independent of the enormous quantity of tin stuff in the levels below. It is a fact that there are upwards of 50 fms. of tin stuff in the Caddy's lode. The shareholders will bear in mind that the Tresavean Mines, which were formerly worked for copper, are full of tinstuff; that the shafts and levels sunk and driven in granite, are in good condition; and that as soon as the 90-in. engine, which is now approaching completion, is started, the production of tinstuff, yielding a handsome profit will be large and continuous. The main parts of the 90-in. engine and two of the boilers are fixed. The steam capstan, too, is nearly completed—in fact, Messrs. Loam and Son report the engine to be in a very forward state. It is the wish of the directors that shareholders, who can give the time, should visit the mine, and so realise for themselves the prospects there are of large returns in a short period.—EDMUND HARVEY, Secretary.

Particulars of the eight samples of tin referred to above:—No. 1: Produce of 9 grs., worth 40½ lbs. of tin to the ton of stuff; No. 2: Produce of 20 grs., worth 90 lbs. of tin to the ton of stuff; No. 3: Produce of 5 grs., worth 22½ lbs. of tin to the ton of stuff; No. 4: Produce of 20 grs., worth 90 lbs. of tin to the ton of stuff; No. 5: Produce of 8 grs., worth 36 lbs. of tin to the ton of stuff; No. 6: Produce of 3 grs., worth 27 lbs. of tin to the ton of stuff; No. 7: Produce of 16 grs., worth 72 lbs. of tin to the ton of stuff; No. 8: Produce of 12 grs., worth 54 lbs. of tin to the ton of stuff. Total = 544 lbs. of tin to the ton of stuff.

TRESAVEAN MINES (LIMITED).—Feb. 4: After waiting a long time on the foundry company for parts of the 90-in. engine, they have this day forwarded the main loops, motion bars, and pins, stools and gudgeon for balance-bob, &c., which will enable us to be busy for the next few days, and hope, in the meantime, the reduction pipe will be delivered on the mine, then very little will remain to be done to the engine in the house. In the next week the carpenters will put in some of the beams, flooring and doors, which I am anxious to have done. The engineers have also fixed the winding drum and worm of the steam capstan, so they have not been idle for want of work. We have to-day reset the shears over Harvey's engine shaft. I have just received a letter from the Penryn Foundry Company saying that they will get on with the pumps with all possible speed. The men are doing good duty in laying the sleepers for the tram-road. We have also fixed the frame of the stone-breaker, and the masons are now engaged building the loading of the engine for the same. We have on the mine four stamp axes, and I have engaged a carpenter to put two of these on the horses at once. I am very desirous also that this work should be proceeded with, especially as the last few days samples from Caddy's lode, and find that my previous report is not only borne out but that the average produce of eight samples taken and assayed is 50 lbs. of tin to the ton of stuff, or equal to 20l. per fathom, the cost of stoping and returning will be about 9l. per fathom. There is an improvement in the lode in the back of deep adit since I have taken the samples, this lode not being worked on under the deep adit, and with the prospect of driving and cutting Wheal Comfort tin lode on the north, and having it about 140 fms. through the western part of the sett is a mine of itself. I shall put on more men to break tinstuff next week. We have put the portable engine at work, and have drawn some tinstuff to surface, we have a good many tons broken which will be drawn at once. The masons are engaged putting in laundries, to prevent Trethellan adit water going down into the mine, which will be finished in a few days.—JOSEPH JAMES.

Mr. William Hodgson has withdrawn from the firm of Hodgson and Stead (Limited), and accepted sole agency in Lancashire and Yorkshire for Messrs. W. and T. Avery, of Birmingham, manufacturers of weighbridges and every description of weighing machinery, extensive premises having been opened at Salford, Manchester, where will be kept in stock an assortment of weighing machines and an efficient staff of workmen, for the repairs and adjustment of every description of weighing plant.

IRON AND STEEL INSTITUTE.—The council of this Institute have accepted the invitation of the Austrian iron trade to hold their next autumn meeting in Vienna. The meeting will commence on Sept. 20 next, and is expected to last over several days. It is understood that excursions will be made to different points of interest to the iron trade in Austria, including the capital of Hungary (Pesth), and the capital of Styria (Graz), one of the very oldest iron-producing

districts on the Continent of Europe. The meeting will present features of attraction, and the gathering is expected to be large and influential. The spring meeting will be held as usual at the Institute of Civil Engineers, commencing on May 9.

#### FOREIGN MINES.

ST. JOHN DEL REY MINING COMPANY (Limited).—Advices received Feb. 15, 1882, ex Elbo, dated Morro Velho, Jan. 18:—GENERAL OPERATIONS.—GOLD PRODUCE FOR THE MONTH OF DECEMBER.—The gold extracted during the above period amounts to 24,315·8 oits., equal to 2803·2161 ozs. troy. It has been derived as follows:—

	Oits.	Tons.	Oits. per ton.
General mineral	14,227·2	from 3793	= 3·803
ditto Praia	2,130·8	606	= 3·516
Mineral free from kilias	6,765·9	1218	= 5·565
Re-treatment	23,323·9	5617	= 4·152
Total	24,315·8	5617	= 4·321
Add sundries—scrappings of retort plates	30·0		
	24,345·8		

The falling off in the yield per ton is attributable to the large admixture of kilias with the mineral treated during the month, operations on our best mineral ground having been greatly interfered with owing to the placing of necessary timber in the mine.

The facility afforded by the tramroad, lately completed, for the transport of mineral from the western section of the mine is very great; but, unfortunately, the mineral quarried principally from the western driving and from the walls of the excavation has been, as above stated, of very low grade.

COST AND PROFIT.  
Produce for December, 24,345·8 oits.  
Less loss in melting ... 161·9 ..  
Cost .. 24,183·9 oits., at 7s. 9d. per oit. .... £ 9,371 5 2  
7,196 12 6

Profit for the month .. £2,174 12 8  
MINE.—Mineral raised from the mine .. 6276 tons  
Mineral quarried per borer per diem .. 2·44 ..  
Average attendance of borers daily .. 95·65 ..  
Average attendance of natives daily .. 238·93 ..

MEASUREMENTS FOR THE MONTH OF DECEMBER:—

SINKING SUMP VERTICALLY .. 3 ft.  
EASTERN SECTIONS.—The placing of necessary timber for securing the walls and repairs and alterations in the pump-work have very much retarded operations in this section of the mine, as well as in the sump. But taking these into consideration the duty performed in stoping and sinking is not unfavourable.

299 D.—Operations were vigorously conducted on this stope, and a large quantity of average mineral was obtained therefrom. The appearance and width of the lode continue as previously reported, viz.:—Stope about 30 ft. wide, of which 10 to 15 ft. is good mineral.

299 C.—The width of the stope in this section is now about 24 ft., the mineral-bearing portion thereof is becoming still more contracted as it approaches the bar of kilias.

NOS. 3 AND 4 STOPES IN SAME SECTION.—During the month operations in this part of the mine were very limited, the greater part of the force being required for other more important work.

298 B.—The stope here is now about 34 ft. wide, of which 12 ft. is good and 8 ft. mixed mineral.

297 B.—Good duty has been done on the stope on this section, and as it has now entered into the mineral ground of the B sink we hope to get a supply of good mineral therefrom.

296 B.—Operations were chiefly directed to stripping down the lode on the north side of this section of the mine, which continues to be of very good quality.

EASTERN STOPES.—SECTION 237.—A large quantity of good mineral was quarried from these stopes, but owing to our limited power of hauling them from we were not able to fully avail ourselves of it. Another plan of hauling is in contemplation, whereby we trust to have the work more expeditiously and easily performed.

DRIVINGS EASTERN LEVEL UNDER ROOF.—SECTION 217.—Extended 14 ft. 6 in. No change in mineral contents of lode.

SECTION 215.—This was extended 14 ft. 6 in. There is no change to note in the appearance or size of the lode in the forebore, but as extension east is made the lode continues to turn in a northerly direction.

DRIVING NORTH.—SECTIONS 234 AND 255.—Operations in these drivings were conducted for only a limited period of the month, it having been determined to suspend them until the plan of working the mineral standing north is decided upon.

The duty performed was respectively 2 ft. 7 in. and 2 ft. 11 in.

CULIABA COST.—Expenditure on capital account .. £ 697 19 11  
Surface buildings and other works .. £ 738 7 9

MINE DEVELOPMENT.—New machinery and deep adit .. 738 7 9  
Total cost .. £1436 7 8

DEEP ADIT.—Distance driven during the month .. 14 fms.  
The duty is not equal to that of the preceding month consequent on very hard rock having been encountered.

VAZ'S SINK was deepened during the month .. 18 ft. 8 in.

REDUCTION PLANT.—Energetic efforts are being made to complete the erection of the new stamps as speedily as possible, but some delay was experienced in the early part of the month for want of timber, and by the withdrawal of a part of the force for imperative repair work on the rego.

An ample supply of timber has since been received, and it is hoped that rapid progress will now be made.

MORRO VELHO—GOLD EXTRACTED TO DATE.—The produce for the first division of January, a period of eleven days, amounts to 7766·3 oits., equal to 895·3477 ozs. troy. It has been derived as follows:—

	Oits.	Tons.	Oits. per ton.
General mineral	4,970·5	from 1325	= 3·751
ditto Praia	788·0	221	= 3·516
Mineral free from kilias	1,639·0	380	= 4·317
Re-treatment	7,462·5	1926	= 3·873
Total	14,859·0	3912	= 3·800

The low yield per ton of the mineral free from kilias is in consequence of a large quantity of general mineral containing a considerable admixture of kilias—was treated at the Herring Mill during the division in question. For reasons already explained a sufficient supply of higher-grade mineral was not available.

MINE.—Return of duty for 13 working days:—

Mineral raised from the mine .. 2676 tons  
Mineral quarried per borer per diem .. 2·66 ..  
Average attendance of borers daily .. 77·23 ..  
Average attendance of natives daily .. 258·38 ..

No change to advise in any section of the mine.

Telegrams received:—On Jan. 24, dated Rio, 23rd—"Produce 11 days (2nd division of Jan.), 7750 oits.; yield, 4·0 oits. per ton; profit for the month of December (1881), 2100l."

On Jan. 31, dated Rio 31st—"Produce ten days (second division Jan.) 7250 oits. yield, 4·3 oits. per ton."

On Feb. 13, dated Rio 11th—"Produce month of January, 23,000 oits.; yield, 4·1 oits. per ton."

THE ALMADA AND TIRITO CONSOLIDATED SILVER MINING COMPANY (LIMITED).

EXPLORARY WORK—GULIAS.—J. H. Clemen, Dec. 17: 8 feet were driven, making a total of 152 ft.

Dec. 31: The heading was advanced 8·4 ft., making a total of 160. Price 812s. A few more weeks ought to show whether the lode lives to this depth. There is a danger that the quartz seams we have lately traversed are the lode broken up. The breast is in a coarse-grained granite.

Jan. 14: 6·7 ft. were driven, Price 813s. 14. Total, 167 ft. Stones of mixed country rock and lode matter quartz were encountered in a seam running diagonally across the drift; some of these showed spots and stains of green ore.

16 A.—Dec. 17: 5·3 ft. were driven; the ground is harder. There is still a branch of dredgy ore 1 ft. wide in breast, equal to about 3 in. of milling ore.

Dec. 31: 2·3 ft. were driven. No further encouraging feature was met with, and the drift was stopped.

DRIVING NORTH NEAR MAIN SALON IN TUNNEL.—Dec. 17: A contract is set to day to drive on an ore chute that we have for some time wished to follow; location north 120 ft., and east 9 ft.

Dec. 31: The veinlet dwindled to nothing. The drift is still being continued by day only; drainage, 5 feet.

Jan. 14: Drivage, 3·8 ft., at 813. This drift will now be worked day and night. It will explore the ground west of our stope better than could be done by ore cutting, and will on reaching the cross-cut give us a new tunnel—so that we can take away a block of ore which we are obliged to leave for the present under the existing tramway. To take away said block the present tramway must be destroyed.

CROSS-CUT SAN JOSE IN TUNNEL AT JUNCTION OF GULIAS AND VETA MAHER.—Dec. 17: A contract was to-day set for continuing this cross-cut; location, north 370, east 130 approximate (not surveyed)—same datum. This is as far north as we can work in tunnel at present.

Dec. 31: We drove a further 6 ft. and struck the lode. The lode matter is usual here quartz; no ore shows itself so far. The lode is undoubtedly the western branch. We should like to push this drift day and night, but it is far from ventilation that we cannot do so without forcing air to the working.

Jan. 14: 4·9 ft., at 811 to 812. The cross-cut continues to traverse lode matter. No ore of any value has been met with.

PRIMEIRA VETA.—Dec. 17: A contract to continue north was let to-day.



BRITISH MINES.



**Intersected.**—Wheal Emma, Inclined Shaft: In the 137 east, east of Friend's cross-cut, the lode is 6 ft. wide, composed of capel, quartz, peach, prlan, and small quantities of copper and mundle ore.—New Shaft, New South Lode: In the 115 east the lode is 2 ft. wide, of a promising character, and yielding a little of both copper and mundle ore.—Railway Shaft: In the 205, west on the south part of the lode, the lode is 3 ft. wide, composed of capel, quartz, peach, prlan, and a little copper ore. In the 190, west on the south part of the lode, the lode is 4 ft. wide, of a promising character, and yielding some copper and mundle ore. In the 175, west on the south part of the lode, the lode is 2 ft. wide, composed of capel, quartz, peach, mundle, and a little copper ore. In Denner's winze, sinking below the 175 west, on the south part of the lode, the lode is 4 ft. wide, of a promising character, and producing some saving work of copper and mundle ore. In the 160, west on the south part of the lode, the lode is 6 ft. wide, composed of very fine capel, quartz, peach, mundle, and a little copper ore of good quality.—Watson's: The cutting of plat at the 88 has been completed, and the engine-shaft is again in regular course of sinking in the country on the north side of the lode, the ground being tolerably favourable for progress, and very congenial for the production of mineral. There is nothing new to remark upon at any of the other points of operation throughout the mines.

**DEVON GREAT UNITED.**—I. Richards, Feb. 16: At Willesford's shaft, sinking below the 104, the lode is 2 ft. wide, composed of capel, quartz, peach, prlan, some good arsenical mundle, and a little copper ore of good quality. We continue to drive by the side of the lode in the 50 and 60, west of Watson's shaft, for more steady progress. In the cross-cut south at the 225, east of Willesford's, the ground continues of a favourable character for the production of mineral.

**DRAKE WALLS.**—M. Bawden, Feb. 16: Since our last report we have sold 19 tons 19 cwt. 1 qr. 17 lb. black tin, at 67½. 10s. per ton, realising 1347.13s. 7d. We have now at work, underground, 50 men—23 on tubwork, 22 on tribute, three securing shafts, and two filling skips. The contracts are: Seven men driving deep adit level, west of cross-course, towards Mathews' shaft, 80 fms., at 42. 15s. per fathom, 25 fms. yet to accomplish, working by aid of rock drill; six men driving deep adit level, west of Mathews' shaft, at 42. 10s. per fathom; six men cutting plat at the adit level at engine-shaft, which when completed the men will drive east towards Mathews' shaft. The whole of this work we hope to complete by the end of April, when we shall have about 170 fms. of levels laid open on the south branches at this deep adit or water level. It must be borne in mind that from the whole of the foregoing work we have not yet had the benefit of a single pound of tin ore, as we have had no means of bringing it to surface, nor can we until a communication is made with Mathews' shaft. We have four men driving the 40 west of engine-shaft, at 52. 10s. per fathom. In about 10 fms. more driving we shall intersect a large cross-course, and to the west of which we expect to meet with some rich paying tin ground. Of the 22 men working on tribute at 10s. in the 15 and 50, 20 per ton for black tin, only 18 have as yet returned any tin, and the price made, 67½. 10s. per ton, will really bring back the tribute to less than 7s. 6d. in the 15, the men also having to spall and pick the tinstone and get it ready for the stamping mills. This we consider highly satisfactory. At surface we are employing 26 men and boys doing the necessary repairs and dressing tin ores. The cylinder of the steam stamps was found to be in very bad order, and we have made arrangements to have the same re-bored in its position, without breaking any of the joints or removing it from the building; this we find can be done very cheaply and very expeditiously, and we expect within a fortnight to be in a position to work the steam stamps which we require to do so. The more I see of the mine the more I am confirmed in my opinion that we have a very property in Drake Walls.

**EAST BLUE HILLS.**—S. Bennetts, Feb. 15: The lode in the adit east end maintains its size and appearance well, although the leader part of it is not quite so wide as it has been, and is now worth 18s. per fathom. The 40 east end is again producing some good stones of tin, and we are hoping a change for the better here shortly. The pink lode workings are cleared to the east end (which is 20 fms. east of cross-cut), in which, however, the lode is apparently missed. Everything is looking so much in mud that it will require a few days to open out the lode as to see much of it.

**EAST BLUE HILLS.**—S. Bennetts, Feb. 16: The lode in the adit east end is now worth 25s. per fathom. We hope to get four heads of stamps ready by Monday next, and we have probably 3 to 4 tons of tin in the accumulated tinstuff on the mine in readiness for stamping.

**EAST CARADON.**—Wm. George, John Kellow, Feb. 15: The following is a report of our setting on Saturday last:—To drive the 175 cross cut south by nine men, stent the month, at 20s. per fathom; there is little or no change in the ground—still in elvan. To drive the 150 east, on the counter lode, by six men, 10 fathoms stent at 9s. 10s., the lode here is looking much more promising, and is fully 2 ft. wide, composed of quartz, mundle, and good spots of copper ore. Believing the south part of Child's lode has not yet been intersected in the 1:0, we have put two men to continue the cross-cut further south for proof of this, where we hope to meet with a better defined lode than has yet been seen in this level; stent the month, at 8s. 10s. per fathom. To drive the 90 west on Fawcett's lode, by two men, stent the month, at 5s. 10s. per fathom; lode small, with spots of copper ore. To stope the bottom of the 70 by six men, stent the month, at 3s. 10s.; worth 1½ ton of tin. To stope the back of the 60 by six men, stent two months at 4s. 10s., yielding 1½ ton per fathom. To stope the bottom of the 60 by six men, stent the month, at 2s. 17s. 6d.; yielding 2½ tons per fathom. To stope the back of the 60 by four men, stent the month, at 3s. 5s.; yielding 1¼ ton per fathom. We have also set three tributes at different levels, at 15s. in 14.

**EAST CHIVERTON.**—R. Southey, Feb. 15: Good progress is being made in driving the cross-cut from the engine-shaft at the 100 fm. level to the lode, which we may safely calculate on reaching within a month. Considering the very great improvement in the lode at the 90 compared with the level over, the 74, and the extending of the ore ground, both east and west, at the 90, we shall drive a fine level east as well as west on reaching the lode at the 100. We have about 400 fms. to the east of the shaft on the run of the lode on which nothing has been done below the 50, where some 40 fms. were driven, and occasional patches of very good ore met with, in a lode very favourable for the production of silver-lead ore; consequently, we may expect at an increased depth of nearly 50 fms. a similar improvement as we have found in the western levels. No alteration in the value of the mine since my last.

**EAST GRAYEN MOOR.**—David Williams, Feb. 15: All our ore-producing points throughout the mine are looking well, and all is going well. We have weighed off the produce of 25 tons of lead ore, and have other 25 tons in course of smelting. Full report next week.

**EAST LONG RAKE.**—H. B. Vercoe, Feb. 16: In the 50, driving west, the lode is becoming more settled as we get from the influence of the flat, and it is producing good lumps of ore. There has been nothing done in the sump below the 50 west, on flat since my last report, as we are not yet quite free from water; these men are continuing the cross-cut further north on the flat to intersect the Old Long Rake lode, and which we shall do in 2 fms. further driving; and as this of sinking in this district. The energy displayed by the present company at engine-shaft is a very interesting and important point, and I fully expect to find it productive. The lode in the stope in the roof of the 50 west produces ore as for some time past; we have been winding leadstuff to-day from the stopes, and I never saw better in the mine. The 50, driving east, produces some saving stuff for dressing, and the lode enlarging a little, and promising to improve. The men have commenced working again on the shallow flat, and are raising leadstuff of the usual quality. Mr. Eytan has taken delivery of his portion of the parcel of lead, sold at the Holywell Ticking, and we are daily expecting Messrs. Walker, Parker, and Co. to send for theirs. Dressing proceeds towards another sampling.

**EAST ROMAN GRAVELS.**—A. Waters and Son, Feb. 15: The stope in the bottom of the 109, south of winze, is worth 3 tons of lead ore per fathom. The lode in the 97 south is 1½ ft. wide, worth 15 cwt. of lead ore and 10 cwt. of blende per fathom. The same level north of the winze from the 86 is in a lode 2 ft. wide, worth 12 cwt. per fathom. The winze below the 86 south, on the east part of the lode, is in a vein 3 ft. wide, worth 2 tons of lead ore per fathom. The two stopes in the back of the 85—one north and the other south of the winze—are looking good. The 80, driving east, is worth 1 ton of lead ore per fathom. The 75 south is worth 1 ton of lead ore per fathom. We have today sold 40 tons of lead ore and 20 tons of blende for 423.

**GODDARD'S LEAD.**—R. H. Vivian, Feb. 16: We have not taken down any of the lode in the shaft since my last report; as we find we can make more dispatch by sinking by the side of the lode we shall take it down in the course of three or four days, when I will let you know its value. The sinking is progressing very favourably; we shall soon put in another pump.

**GOODVEVER.**—R. Knott, Feb. 15: During the past week we have laid tramroad in the shallow adit cross-cut, and put in a pump, and are now working some idea as to the value of the lode. In the 15 in the back of the shallow adit not sufficient done to report on; the men have been securing the back of the level.—New Lode: There is no change to notice since the report last week. The lode is a little disordered, but turning out a lot of tin stuff for the stamps.

**GREEN HURTH.**—James Polglase, Feb. 11: I have great pleasure in reporting a good lode in sinking Swan's shaft; worth about 3 tons per fathom. This is most encouraging, and at the same time the most conclusive answer to all who entertain doubts as to the sinking in this district. The energy displayed by the present company does the credit of the neighbourhood, in proving the fallacious idea of the non-existence of mineral in paying quantities beyond certain local notions. The bottom level north is worth from 5 to 6 tons of ore per fathom. All the stopes are just the same in value as last reported. We are very busy in every department.

**GREAT HOLWAY.**—W. T. Harris, Feb. 16: Roskell's Shaft: In the 110 west the lode is 5 ft. wide, favourable for progress, and similar in character as for some time past. Water issues freely from the north side, indicating an early change in the 95 north the lode is producing 1 ton of lead ore per fathom, and very promising for improvement.—Level Engine: In the 80 east the lode is 3 ft. wide, principally lead and blende, worth of the former 1½ ton per fathom. The communication between this and the 60 is now complete, and consequently good ventilation prevails throughout this section of the mine. In the 50 east the cross-cut has proved the width and character of the lode. Driving has been resumed in an easterly direction, where there are several new branches of lead, and affording great encouragement. I anticipate an early improvement. The stope in the bottom of this level, east of winze, is opening out well, and the lode yielding 1½ ton of lead ore per fathom; No. 2, in the back of the lode, is worth 4 tons of lead ore per fathom; No. 3, in the back of the lode, is worth 1 ton of lead ore per fathom; No. 4, in the back of the lode, is worth 1 ton of lead ore per fathom; No. 5, in the back of the lode, is worth 1 ton of lead ore per fathom; No. 6, in the back of the lode, is worth 1 ton of lead ore per fathom; No. 7, in the back of the lode, is worth 1 ton of lead ore per fathom; No. 8, in the back of the lode, is worth 1 ton of lead ore per fathom; No. 9, in the back of the lode, is worth 1 ton of lead ore per fathom; No. 10, in the back of the lode, is worth 1 ton of lead ore per fathom; No. 11, in the back of the lode, is worth 1 ton of lead ore per fathom; No. 12, in the back of the lode, is worth 1 ton of lead ore per fathom; No. 13, in the back of the lode, is worth 1 ton of lead ore per fathom; No. 14, in the back of the lode, is worth 1 ton of lead ore per fathom; 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## TO THE METAL TRADE.

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OLD METALS of EVERY DESCRIPTION PURCHASED for CASH.

## The Mining Market: Prices of Metals, Ores, &amp;c

METAL MARKET—LONDON, FEB. 17, 1882.

IRON.	£ s. d.	£ s. d.	TIN.	£ s. d.	£ s. d.
Pig, GMB, f.o.b., Clyde...	2 9 1	—	English, ingot, f.o.b., 115	0 0	—
" Scotch, all No. 1 ...	2 10 3	—	" bars ...	117	0 0
Bars, Welsh, f.o.b. Wales	2 6 5	0	" refined ...	118	0 0
" in London ...	6 12 6	15 0	Australian ...	111	0 0-111 10 0
" Stafford ...	7 15 0	8 5 0	Banca ...	—	—
" in Tyne or Tees ...	6 10 0	6 15 0	Straits ...	111	0 0-111 10 0
" Swedish, London ...	10 0	10 10 0			
Rails, Welsh, at works ...	6 2 6	6 5 0			
8 sets, Staff., in London ...	9 0	9 10 0			
lates, ship, in London ...	9 7 6	9 12 6			
Hoops, Staff., in London ...	8 0	8 5 0			
Nail rods, Staff., in Lon.	7 15 0	8 0 0			
STEEL.					
English, spring ...	12 0	12 0 0			
" cast ...	30 0	30 0 45 0 0			
Swedish, keg ...	15 0	—			
" fag. ham. ...	15 0	—			
LEAD.					
English, pig, common ...	14 15	0 15 0 0			
" L.B. ...	15 0	0 15 0 0			
" sheet ...	15 10	0 15 0 0			
" pipe ...	16 0	—			
" red ...	17 10	—			
" white ...	21 10	0 23 0 0			
" patent shot ...	17 12	6			
Spanish ...	14 10	0 14 15 0			
NICKEL.					
Metal, per cwt. ...	15 0	0 16 0 0			
Ore, 10 per cent. per ton ...	20 0	0 25 0 0			
QUICKSILVER.					
Flasks, 75 lbs., war. ...	6 0	—			
SILVER.					
Silesian ...	17 0	0 17 10 0			
English, Swansea ...	17 15	—			
Sheet zinc ...	21 15	—			

\* At the works, 1s. to 1s. 6d. per box less for ordinary; 10s. per ton less for  
 Canada; 1X 6s. per box more than 10 quoted above, and add 6s. for each X.  
 Terne-plates 2s. per box below tin-plates of similar brands.

**REMARKS.**—Notwithstanding occasional fluctuations, which at times predominate in our markets, and which necessarily must produce a proportionate mischievous bearing upon the trade generally, yet in giving due weight to all the various circumstances, both in favour of and against the several markets at the present time, it must be still acknowledged that although the demand just now for some metals is perhaps rather restricted, and prices, in consequence, have here and there assumed an easier tendency, yet the state of the trade, taken on the whole, is good; what is doing appears to be principally for legitimate account, and as prices recede business appears to develop. Too much importance is often attached to the sundry movements of prices caused from speculation, and too often a hasty conclusion is arrived at that because prices recede that is a criterion that trade is likely to be bad, but it does not require many remarks to prove the fallacy of such an opinion. According to the manner in which operators view the future of the markets as they buy or sell, and prices for the raw material are accordingly influenced. It is true that the prospects of trade is perhaps about the chief event whereby speculative transactions, either for the rise or fall, are regulated; but it is not the sole cause to affect speculative business. Political, monetary, and agricultural affairs have all their bearings upon the markets, some in a greater others in a lesser degree, but nevertheless all in a measure affecting the actual amount of business doing at the present time for speculative account. It is not necessary now to show how these various circumstances affect prices, nor is it needful to state the actual amount of bearing they have separately upon our markets, it being sufficient to notice in passing, they are points which cannot be altogether disregarded for the course which they are taking either gives confidence to or unnerves operators, and prices are thereby determined.

It may, however, be argued that these are events which can only influence such metals in which speculation exists, and as there is comparatively speaking very little speculation in manufactured metals if prices for the latter move it must be the result of bona fide trade. Undoubtedly this is invariably the case, but not always necessarily so; prices are often in great measure governed by those ruling for the raw material, and if they rise or fall it will generally be found that they are merely following the tendency of the markets for the raw material. Buyers would, therefore, probably do well not to be too confident that because prices have this week been easier that they are likely to recede to any material extent, as when so much speculative interest exists a rebound may at any time occur, and it is quite impossible to foresee how far it would be carried. The fact should not be overlooked that for the most part prices are extremely moderate; and, therefore, on this account instead of there being any impediment placed upon trade there is good reason to expect its further growth and expansion. Heavy stocks may injuriously affect the demand for speculation, and have an unfavourable influence upon prices, but they cannot produce any lengthened detrimental result upon the regular demand. We say lengthened advisedly, for dealers, consumers, and shippers may in seeing stocks augment hold aloof from the markets for awhile in the hope of buying cheaper later on by so doing. But there must soon come an end to this policy, for with the repeatedly increasing requirements of the trade the longer purchases are delayed now the greater they must be hereafter, and as prices now recede so we may expect a proportionate increase in the demand, especially as the winter quarter is fast drawing to a close, and the spring shipments will doubtless shortly begin.

**COPPER.**—The market this week has again assumed a drooping tendency, and business has to be recorded at reduced rates, although it is somewhat difficult to discover the actual cause of the retrogressive movements which have been made. It may, perhaps, be attributed to the fact that just lately bona fide business has not been quite so brisk as could be desired, and in consequence speculators have not been so willing to continue to effect purchases. The small deliveries, as seen by statistics, seem to be the weakest point of the market. Nevertheless with the reduced prices ruling there is reason to hope that the deliveries will soon increase, and be further augmented by the quietude which has lately

existed in the regular demand; at all events it is worthy of note that already, the copper value of this metal has already, to some extent, stimulated buying, and if further concessions are made in price a still greater development may reasonably be anticipated in the demand.

With regard to Chili bars, there has been a very fair business doing this week, but sales have been rather pressed, which, perhaps, is somewhat surprising, considering that the charters from Chili were announced at the early part of the week as only 900 tons for the first half of this month. So small a quantity, we should have thought, might have encouraged buying, and given strength to the market; but the price at Valparaiso being reported lower it has destroyed any favourable influence which may have occurred through the light charter, and the tone has instead of being more cheerful, kept dull, and at times rather depressed. On first sight it may possibly be thought that the market is not likely to be favourably affected by the light charter advised on Monday last, as the charters in January were so particularly heavy, but yet it must be remembered that for the heavy charters for last month there has already been a serious fall in price, so that now a light charter has been announced a rally apparently ought to have taken place. The bi-monthly returns of Chili produce, published on the 15th inst., show the imports during the first fortnight of the month to have been 230 tons, and the deliveries 234 tons, making the stock in first and second hands in Liverpool and Swansea 24,848 tons, against 25,511 tons on the 31st ult. The imports of other kinds of copper from the last to the 15th inst. were 1108 tons, and the deliveries 104 tons. The total imports last month were 6462 tons, against 4046 tons for the same time in 1881, and 5550 tons in 1880, while the exports for the similar periods were 4293 tons, against 4370 tons in 1881, and 4133 tons in 1880.

**IRON.**—The demand for the raw and manufactured material has continued to assume somewhat limited dimensions, and prices are mostly a shade easier. There is not, however, any material change in any branch of the trade, and it is satisfactory to see that, according to reports which come to hand, there is reason to anticipate that the recent threatened strikes, both in the North of England and Staffordshire, which have so disturbed the trade, are now apparently fast drawing to a close, the masters having resolved to comply with the wishes of the men, and grant their requests for an increase in wages. This determination proves that there is hardly likely to be any material fall in prices, and it is in measure testifies that the trade must be in a fairly sound condition that masters must hold numerous contracts, and, therefore, would be put to great inconvenience if strikes took place, or they expect a continuance of a sufficient number of orders at the present rates, which enables them to pay the advanced wages, otherwise they would scarcely have made any alteration in the wages scale. This, then, is a satisfactory feature, and dispels the idea that any great reduction is at all likely to be speedily made in prices, and although at times some few concessions may be made to obtain good specifications, yet purchasers will probably not be able to secure their iron upon terms more advantageous than those now ruling.

It may be urged that orders of late have not been very plentiful, and that the briskness which has been reported at the various manufacturing centres has been caused almost solely through the large and plentiful orders which were received during the last few months of last year, but even supposing this to have been the case, there is nothing in that to expect that future orders will be limited. On the contrary, if orders have not been so large or numerous as could be desired during the past month or so, there is the more cause for expectation that a steady improvement is visible in nearly all the branches of the trade, and that also by buyers, who do not hesitate to make purchases when the slightest reduction can be obtained off of the general quotations. A favourable feature in connection with the trade at the present time is the continued encouraging advice which comes from America. The report this week shows that the market at New York is steady, and that business is good in nearly all its branches, while prices are for the most part well sustained. Scotch pigs are said to be selling well, and the present price for No. 1 Gartsherrie is £26 5s.; Glengarnock, £25 5s.; and for Coltness £25 5s.; and Eglinton £24 5s. The report from Sheffield states that a steady improvement is visible in nearly all the branches of the trade, and the demand for railway material keeps very brisk. Both in the raw and manufactured material there is a fair business doing with the United States, and in comparing the value of the exports for last month as seen by the Board of Trade Returns, with those for January, 1880, the comparisons will be found to be very favourable.

The Wolverhampton market is reported strong, owing to the concessions made to the men for higher wages, but there does not appear to have been any improvement in the demand, which has continued of a rather limited character, notwithstanding that sellers have been rather pressing for specifications. Plates are said to be 4s. dearer, and latten sheets 5s. higher, and some firms are withdrawing previous quotations. There is but a small enquiry for pigs, which are easy in price. Upon the Birmingham market transactions are said to have been somewhat limited, but prices are quoted somewhat higher, and where orders have been placed there has been less hesitation on the part of buyers to pay the advanced rates. The demand for general merchant iron is decidedly slack, but for sheets, however, there is a steady enquiry. Consumers' requirements are thought to be urgent, so that if manufacturers keep united it is expected that there will not be any difficulty in maintaining prices. The Cleveland market is reported very quiet, and somewhat unsettled, while less confidence is expressed in the future of the trade. Quotations for No. 3 rule at about 41s. 9d., with the usual difference for No. 4, for sharp delivery, and about 3d. more is asked for forward prompts. Warrants are without much change, and are held for 42s. for No. 3. The shipments last week were 15,600 tons, whilst it is satisfactory to note that the stock in Messrs. Connal and Co.'s stores last week was further reduced by 185 tons, and now amounts to 172,531 tons. The manufactured trade is without any new feature, bars and angles continuing to rule at 64, 12s. 6d., and ship-plates at 71 5s. The arrangement which came to some short time ago between the Scotch and Cleveland ironmasters to restrict the output by 12½ per cent. expiring next month, the Middleborough masters held a meeting last Tuesday, when it was determined that another conference should take place with the Scotch trade with a view of renewing the arrangement; although it is believed in some quarters that this will only be done providing the Scotch masters consent to a larger reduction in the production, as Scotch stocks have been greatly increased, while Cleveland stocks have been reduced by about 50,000 tons.

The Glasgow market has been steady, and a moderate number of transactions have been recorded. Opening on Monday at 48s. 10d., the cash price advanced to 49s. 1d., and throughout Tuesday remained without any perceptible change, closing at 49s.; and having opened on Wednesday at 49s. 1d. it improved in the course of the day to 49s. 6d., and business was done yesterday between 49s. 4½d. and 49s. 5d., closing to-day at 49s. 1d. The shipments last week were 10,738 tons, against 10,072 tons for the same week of last year, or an increase of 714 tons, and which makes the total shipments for the whole of this year 57,895 tons, against 53,593 tons for the same time of last year, an increase of 4,302 tons. The number of the number of furnaces in blast remains at 106, and the public stock in Glasgow stores shows a slight increase of 90 tons, now amounting to 631,150 tons, against 631,060 tons last week. The imports of Middleborough pig iron into Glasgow last week were 4390 tons, against 4643 tons for the corresponding week of last year, or a decrease of 253 tons, and which leaves a total increase for the whole of this year compared with last of 11,271 tons.

**TIN.**—The turnover of this metal continues to be upon an extensive scale, and although prices have at times been rather lower this week, yet there is no very material change in the actual state of the market. It is a market in which so much animation exists that an active business is invariably done, whether the tendency of prices is towards dearer or cheaper rates. There is not very much importance attached to slight movements, such as 2s. or 3s., which may occur in the price, so that the reduced rate of the week fails to shake confidence, or give any material hope to buyers of being able to purchase at any further great drop, and in such a sensitive market, in which the future course is attended with so great uncertainty, consumers wisely make their purchases at their requirements necessities. It is a satisfactory sign to see that according to the last statistics deliveries are maintained upon a fairly extensive scale, as it shows that irrespective of the large number of transactions carried through for speculative account, there is also a good business doing to meet the regular requirements of the trade.

**SPELTER.**—The market has been flat this week, and the nearest quotations are 17s. to 17½s. for ordinary, and 17½s. to 17s. 15s. for special brands.

**LEAD** is rather steadier at 14½s. to 14½s. for Spanish, and 14½s. to 15s. for English.

**STEEL.**—This market remains steady as regards price, and the demand is rather limited.

**TIN-PLATES.**—A moderate business is doing, but without change in price.

**QUICKSILVER.**—Market quiet, without feature.

The settlement of the usual fortnightly accounts has occupied the chief attention of the dealers in the MINING SHARE MARKET this week, and with a few exceptions, prices rule lower, particularly for tin shares.

Those mostly dealt in have included South Frances, Dolcoath, Wheal Grenville, Wheal Crebor, East Blue Hills, D'Eresby Mountain, East Pool, West Crebor, West Caradon, Bratsberg, Wheal Agar, Wheal Pevor, and a few others.

**TIN** has been rather firmer, and no alteration has taken place in the standard for ores in Cornwall since Jan. 28. Nearly all tin shares are quoted lower, and very little business has been done in them. Blue Hills, 1½ to 2½; Carn Brea, 20 to 22½; Cook's Kitchen, 28 to 30; Dolcoath has declined to 79, and leave off 80 to 82½; East Blue Hills, 11s. to 13s.; East Lovell, 2 to 3. East Pool, 45½ to 46½; Killifreth, 2½ to 2½; New Kitty, 2½ to 2½; Phoenix, 3 to 3½; South Condour, 9 to 9½; South Francis, 14½ to 15; Tincroft, 16 to 17. West Bassett, 13½ to 14½; West Frances, 11 to 12; West Kitty, 8½ to 8½; West Pevor, 14 to 14½; Wheal Agar, 11½ to 12½; Wheal Bassett, 5 to 5½; Wheal Grenville, 11 to 11½; at the meeting, particulars of which will be found in another column, the accounts to which we referred last week were submitted and passed, and a dividend of 7s. 6d. per share (2250s.) declared. Wheal Jane, ½ to 1; the sales of tin for six weeks (Jan. 11 to Feb. 10) were 20 tons, realising 1219s., although the calciners were under repair. Wheal Jewell, ½ to ½; Wheal Pevor, 10 to 10½; Wheal Uny, 3 to 3½; Botallack, 5 to 6; at the meeting in Cornwall the accounts showed a loss on three months' working of 448s., and a balance against the mine of 2291s.; a call of 1s. per share was made. West Polbreen, 1½ to 1½; Wheal

Coates, 10s. to 15s.; Wheal Coit, 30s. to 40s.; Drakewalls, 10s. to 12s. 6d.; Goodevere, 1 to 1½; Kit Hill, ½ to ½; West Phoenix, 1 to 1½.

**COPPER.**—Not much change here, and very little doing in shares, which, for the most part, have merely nominal quotations. Bedford United, 1 to 1½; Carnarvon Copper, ½ to ½; Devon Great Consols, 7½ to 8. Devon Friendship, ½ to ½; the 30 east improves, and in a rise just begun in the back of the 30 the lode is worth 1½ ton of copper ore and 6 tons of arsenical mundie per fathom; they sell this week 4½ tons of tin. Gawton, ½ to ½; Gunnislake (Clitters), 2½ to 3; Hingston Down, ½ to 1½; Mellanear, 4½ to 4½; Marke Valley, 12s. 6d. to 17s. 6d.; Morfa Du, ½ to ½; Mona, 6½ to 7½; New West Caradon, 4s. to 6s.; Parys Copper, ½ to ½. Prince of Wales, ½ to 1; the 102 ends are not yet into the ore ground; the tin sale this week for the month, 2 tons, realised 125s., and the sampling of copper ore is 60 tons of good quality ore. West Caradon, 10s. to 15s.; West Crebor, 3s. to 5s.; West Seton, 14 to 15; West Tolgus, 20 to 22. Wheal Crebors have been largely dealt in, the low price and the near approach of the lode at the 130 having attracted a good many buyers; they leave off 2½ to 2½.

At South Caradon meeting the accounts showed a profit on the quarter of 317s., and a credit balance of 1783s. The copper ore sold realised 6768s. The agent stated that the mine was looking as usual, but required more capital to keep up even present returns; it was, therefore, resolved to add a large extension of ground to the set, and form the mine into a limited company, in 100,000 shares of 1s. each, the present holders to have 50 of them fully paid up for 1-512th share now held. New Cook's Kitchen, 3½ to 4; East Caradon, ½ to ½.

**LEAD** has been firmer at a small advance upon last week, and one or two lead mines have been in moderate demand. Vans are quoted 7½ to 8; Great Laxey, 17 to 18. Roman Gravel, 9½ to 10½; the sale of ore (200 tons) realised 9s. 13s. per ton=1930s. Tankerville Consols, 4s. to 6s. Pennerley is said to look well, and Tankerville has sampled 40 tons of lead ore. East Roman Gravel, 15s. to 20s.; the slope in the bottom of the 109 is worth 3 tons of lead ore per fathom. Winze below the 86 is worth 2 tons. The sale of lead (40 tons) and 20 tons of blende realised 423s. D'Eresby Mountain, 1½ to 1½; the lode in No. 5 level end south has improved to 5 tons of lead ore per fathom, and soon a communication will be made between No. 5 and No. 6 in the lead ground, the latter being 15 fms. deeper than No. 5. Gwydwr Amalgamated, 10s. to 15s.; the prospects here are materially improving. Herodsfoot, ½ to ½; the sale of lead ore for two months amount to 75 tons—30 tons at 17½s. 6d. per ton and 45 tons at 15s. 11s. per ton. The mine is said to be looking much better. Great Holways, 5 to 5½; 30 tons of lead sold yesterday for 11s. 19s. per ton=358s. 10s., the assay being 82½ per cent. of lead and 14 ozs. of silver. Crosswood, ½ to 1½; Fronogoch, 2½ to 3. Grogwinion, 2 to 3; has sampled 50 tons of lead ore. Grogwinion, 1½ to 1½; Ystwith, ½ to ½; Bwlch, 1½ to 2; Goddard's Lead, 1 to 1½; Leadhills, 2 to 2½; North D'Eresby, ½ to ½; South Darren, 1 to 1½; Van Consols, ½ to ½; West Holway, 1½ to 1½; West Lisburne, 1½ to 1½; Sinclair Lead, 1 to 1½.

**FOREIGN MINES.**—Akankoo, ½ to ½; Anglo-African Diamond, 7½ to 8½; Broadway, 6½ to 6½; Canadian Copper and Sulphur, 1½ to 1½; Chile Gold, ½ to ½; Colar Gold, ½ to ½; Cootacovil, ½ to ½; Devala Central, ½ to ½; Devala-Moyar, ½ to ½; Devala Provident, 1-16th to 3-16ths; Hoover Hill, ½ to ½; Indian Glenrock, 1 to 1½; Indian Consolidated, ½ to ½; Indian Phoenix, ½ to 1; Indian Trevelyan, ½ to ½. La Plata, 2½ to 2½; the 30th consecutive monthly dividend (12 per cent. per annum), out of January, profits will be paid on Wednesday, March 1. Mysore, 1 to 1½; Mysore Reef, ½ to ½; Oregum, ½ to ½; Rhodes Reef, ½ to ½; South Indian, 1 to 1½; Tambracherry, ½ to 1; Almada and Tiritio, ½ to ½. Arendal, 2½ to 2½; the different points are valued in the aggregate at nearly 25 tons per fathom. The mines are said to be looking better than they have done for two years past, the best part being in the bottom. Brazilian Gold, 1 to 1½. Bratsberg, 1½ to 1½; the manager's monthly report is considered favourable, the different places in operation being worth in the aggregate about 250s. per fathom, and several other points will soon be resumed in a good lode. The ore broken is estimated at 5000s., the company having taken possession in October last.

Birdseye Creek, 1½ to 1½; the clean up at Red Dog claim for January, \$6000; remittance, \$2000. Kapanga, ½ to ½; the mail delivered during the month has brought encouraging particulars of the developments in both lodes. Santa Barbara advises show a profit of 5247 7s. 3d. for the month of December, in addition to 2947 18s. 3d. expended on capital account. Michipicoten, 1 to 1½; a telegram bringing news from the mine to Jan. 13 has been received. At that date very satisfactory progress had been made, both at surface and underground. Placerville, 1 to 1½; clean up for the month \$5000. Gold Run, 1 to 1½; Cape Copper, 46 to 48; Colorado, 1½ to 2; Copiapo, 3 to 3½; Emma, 2½ to 2½; English Australian, ½ to ½; Frontino and Bolivia, 2½ to 3½; Mysore Reef, ½ to ½; New Quebrada, 4½ to 4½; Nouveau Monde, ½ to ½; Panulicillo, 5½ to 5½; Richmond, 10 to 10½; Ruby, 2 to 2½; St. John del Rey, 185 to 195; Tocopilla, ½ to 1; Tolima, 3½ to 3½; Wentworth, ½ to ½; South East Wynaad, 1 to 1½; Wynaad Perseverance, ½ to 1.

The Market for Mine Shares on the Stock Exchange has been very limited throughout the week, although in some particular shares numerous transactions have taken place. Metals generally are decidedly weaker, and copper and tin to the extent of 10s. or 1½, and lead about 5s., but the amount of business done at the lower prices has not been large, owing to the general opinion of holders that the dullness is but temporary; therefore, they do not press sales. South Caradon is to be converted into a limited company, with 100,000 shares of 1s. each, and the advantages of Limited Liability over the Cost-book System are so obvious that the shareholders may be congratulated upon the course they propose to adopt. If a competent and energetic London manager be appointed there can be no doubt that the shares will be much more readily marketable, and will command a higher value. The market generally closes this evening with much stronger feeling.

In Indian gold mine shares there has again been a fair amount of business, and prices are somewhat higher. In the case of Gibb against the Great Southern Mysore Gold Mining Company, Mr. Justice Manisty has decided that where a promoter adds 13,000s. to the real purchase price of 32,000s., and states that 45,000s. is the purchase money to be paid by the company, it is such a misrepresentation that applicants for shares upon discovering the discrepancy are entitled to a rescission of the contract, and the return to them of the amount subscribed. It has for some time past been customary for prospectuses to state on the face of them that the vendor is the promoter, and has fixed the price to be paid by the company. It would be worth while testing whether in that case the difference between the price at which the property is purchased and that at which it is sold to the company would be treated as promoters' loading, and warrant an application for return of subscriptions. The Great Southern Mysore at once gave notice of their intention to appeal, and time was granted for that purpose.

The Oregum Gold Mining Company have received conclusive evidence by the last mail that the rumours of the 40 ozs. of gold not having been obtained from their mine is groundless. The secretary has shown us the formal legalised affidavits referred to in his letter in another column.

Indian Gold Mine shareholders may at last be congratulated that some Indian gold will shortly be on its way to England. The patience of many of these gentlemen having become exhausted in consequence of no remittances having been received from the mines, and of the small contents of gold reported in the reefs, a formal application has been made to her Majesty's Secretary of State on behalf of the Cherambadi and other companies to permit a fine specimen of Indian quartz showing several ounces of visible gold, and which has been for many years exhibited in the Calcutta Museum, to be temporarily transferred to South Kensington, in order that impatient shareholders may have demonstrative evidence that gold is not entirely absent in the Wynaad. The stone is said to have been obtained from Wright's level. In connection with gold extraction an important discovery has been made by Mr. C. F. Bray, the late manager of the Great Southern Mysore Company, and is referred to in another column. He has ascertained that 0.01 per cent. of 2240 lbs. is 3 ozs. 5 dwts. 3 grs.; it was previously been calculated at 3.58 ozs., or 3 ozs. 11 dwts. 18 grs. By his inability to calculate a percentage Mr. Bray has done much to throw discredit on a pre-



cess which with proper management would without question have permitted 3½ oz. of gold to be extracted from each ton of Indian reef stone treated by it, and the promoters of the Dulcamara Company will have a good cause of action against him should they fail to obtain the 5,000,000 capital necessary to enable them to pay the 50 per cent. dividends for the current year on the aggregate capital of the companies adopting the Dulcamara process.

Dolcoath, 75 to 80, have had a great fall from the highest point, owing, it is said, to dissatisfaction being expressed that the merchants' bills remain so many months unpaid, which, if it be the fact, is surely contrary to the true Cost-book System so much boasted of in the county of Cornwall, and the wonder is that shareholders attending the last meeting, knowing this state of things, should allow it, and see in consequence so great a depreciation in the market value of their property. There are other tin mines, it is said, also managed on the same system; and a shareholder, writing this week on the subject, desires to know "how long this disreputable state of things is to last?"

South Devon United shares have advanced to 1½, 1½ since the meeting of shareholders last week, and are likely, it is said, to have a further rise owing to the improvements at the mines and of meeting shortly with important discoveries of copper ores, as alluded to in the reports of the manager at the mines.

Devon Great Consols, 8 to 8½, and it is said are likely to improve in value, as the returns of copper ore and arsenic are increasing. The sampling of copper ore, and for sale next week, is nearly 1000 tons for the month's produce.

Devon Great United, 4 to 1; good copper ore and mundie is now being obtained from the bottom levels.

Kit Hill United, 3 to 3½; some rich tin ore is now being met with in the 62 west.

Drakewalls, 3 to 3½; the London manager (Mr. Peter Watson) has issued a circular, accompanied by a very favourable report of Mr. Moses Bawden on the operations now being carried on (which report will be found in another column). The sale of nearly 20 tons of tin this week realised 67½. 10s. per ton, or in amount 1347½. 19s. 7d., is considered highly satisfactory.

South Devon United sampled on Monday last 320 tons of good quality copper ore.

Walkham United, 1 to 1½; the mines are reported as looking well. The lode in the eastern mine is improving, being now valued at 147 per fathom, and a promising point is being opened upon in the western sett. The stamps on both sides of the river are kept going, and another parcel of tin is being prepared for market.

La Plata, 2½ to 2¾; the news from America show a maintenance of the prosperity already reported. The directors, at their meeting in New York on Thursday, resolved to appropriate \$20,000 out of the January profit to the payment of the thirtieth consecutive monthly dividend at the increased rate of 12 per cent. per annum, which will be paid on March 1 to all shares on the London register on Wednesday next. The smelting statement for the week ended Feb. 11 shows—Ore smelted, 1108 tons; silver produced, 18,348 ozs.; lead produced, 124 tons. Value of consignments equal to 6250½.

Olathe, 3 to 3½; the strongest adverse comments concerning this company's property are published in the Leadville papers, with scarcely an exception, the tenor of the remarks being that the reports which have been published in England concerning it are not justified by facts, and that it is not the desire of those resident in the district that British capital should be invested in any Leadville enterprise, which must result in disappointment, and thus prevent the support of the many Leadville mines capable of returning good profits.

Richmond, 10, 10½ x.d.; the usual telegram from the mines at Eureka, Nevada, state that the week's run was (from one furnace) \$19,000 from 420 tons of ore. During the week the refinery produced doré bars to the value of \$35,000. The return for the week ending Jan. 21 was cabled over by mistake as \$31,000 instead of \$37,000 (the exact return being \$37,265). With reference to the disputes with the Eureka Company the directors have received a telegram stating that everything is settled, and the money paid. The report of the assistant superintendent will be found in another column.

Ruby and Dunderberg, 2½ to 2¾; new shares, 1½ to 1¾; the report from the mines show the usual work being done in the Dunderberg and Atlas Mine, and the prospects generally are favourable. At the meeting on Monday the proposals of the directors for a new capital were favourably received and adopted. The applications from the shareholders for the new shares are, it is stated, coming in rapidly, and it is anticipated will more than absorb the total amount offered.

Birdseye Creek, 1½ to 1¾; a telegram received during the week announces a clean up at the Red Dog claim, and a remittance of \$2000.

Yuba River, par to ½ prem.; heavy snowstorms have prevented a continuance of washings at this mine.

Placerville, 1 to 1½; the clean-up for the month is announced by cable as \$3000. Messrs. John Taylor and Sons, of Queen-street-place, have been appointed London managers of this company.

Kapanga, 3 to 3½; the usual monthly report will be found in another column. Since it was mailed from New Zealand gold had been met with in Scotty's lode at the 50 and in Kapanga lode at the 70.

Michipicoten, 1 to 1½; a cheering telegram has come to hand, bringing news from the island to Jan. 13. At that date the second engine was at work, and a third ready to start, while good progress was being made in the erection of the dressing-floors, the weather being mild and open. In the underground department there was no change to report, and this may be considered as entirely satisfactory.

In the leading Lead Mine shares there has been a good demand this week, especially for such as Great Laxey, Minera, Roman Gravel, Van, Leadhills, Tankerville Great Consols, and several others; so that with only a moderate rise in the price of lead there may be soon an active demand for shares set in with a considerable advance in prices. Pig-lead is thought likely soon to have a great rise, as the demand is increasing and supply decreasing.

Van, 7½ to 8½; the ends in the main lode remain as last reported. At the Van Hill portion of the sett the cross-cut is now 13 ft. through a very fine lode, and the south wall not yet met with.

Roman Gravel, 10 to 10½, and reported in demand; the sale of 200 tons of lead ore on Thursday last realised 1930½. The 65 end has improved to about 1000 per fathom.

Leadhills, 2½ to 2¾; the mine on Browne lode is opening out well.

The Lake Superior Copper Mining Company's list of applications for shares closed last night. It is stated that the board will meet on Monday to allot the shares. A telegram has been received to the effect that Mr. Ingall, writing from the mines on Feb. 2, states that all operations are progressing satisfactorily. The weather is fine and favourable for outside work. No. 1 shaft turning out stronger copper; more shot, less leaf. No. 2, no change.

The Ontario Silver regular (76th) monthly dividend of 50 cents (2s.) per share has been declared for January, and is now payable at the office of Messrs. Eiros and Allen, Cannon-street, on all stock registered in England.

The Queen Hotel, Harrogate, which was constituted as a limited company in 1881, and took over the business from July 1, has just declared an interim dividend for the six months ended December at the rate of 8 per cent. per annum. It is scarcely necessary to state that the Queen Hotel is the most fashionable in that celebrated watering-place. Dr. Myrtle, the well-known physician of Harrogate, has joined the board of direction.

The Apollonia Gold Mining Syndicate have engaged Mr. Dahse, late manager of the Effuente Gold Mining Company, and he has just left England, together with an experienced Californian gold miner, Mr. Walkden, to thoroughly explore the kingdom of Apollonia for gold mining purposes on behalf of the company. The secretary also announces that Mr. S. W. Cairns, a director of the Effuente Company, has joined the board.

Renewed attention was directed to the auriferous resources of Nova Scotia in the *Mining Journal* of Jan. 7, by the notice of the robbery of two magnificent specimens of gold quartz from the Provincial Museum at Halifax, when it was stated that they contained about 54 ozs. of gold, and that Australian and Californian gold miners had expressed the opinion that nothing like them had been

seen. These specimens were obtained from the Oldham gold mines, and in a recent report from Mr. Edwin Gilpin, the Government Mine Inspector for the Province, states that the work, so far as it has been carried proves that the district promises to be one of unusual richness. It seems that the missing specimens are not the only rich ones obtainable in Nova Scotia, for although Dr. Honeyman's anticipation that they would find their way to England has not been realised, some really fine specimens of gold from another—the Caribou—district have just been brought to England by Mr. Touquay, one of the doctor's friends. The principal is a clean grey stone, about 2 in. square; it apparently comes from a vein about an inch thick, and shows visible gold in large proportions; other specimens show visible gold in smaller quantities, and it appears also to occur in quartz boulders. The district is about six miles south of Musquodoboit river, and between 30 and 40 miles from Shubenacadie station. Working has been carried on intermittently since 1867, and several lodes have paid well for a short time—the north, flat, cross, which at one time gave 20 ozs. to the ton, and Hyde lodes among the number. In 1877 a lode 1 ft. thick was formed which in six months yielded nearly 1200 ozs. from a slope of 40 ft., and within a depth of 120 ft., but like all the Nova Scotian lodes it soon gave out, and now produces nothing worth consideration. Mr. Touquay, it appears, states that his workings are stopped because the water is too fast for his hand pump, but if anything like the specimens brought over is obtainable in quantity there would be no difficulty in selling a few tons, and thus obtaining a more powerful machine. Hitherto the Nova Scotian gold deposits have proved lean and disappointing, and although in some cases the discovery of a rich string of quartz has been utilised as an opportunity for selling a property for a few thousand pounds no permanently rich veins have yet been found. Systematic prospecting and operations on the tribute system over large areas can alone prove remunerative.

The Huntington Copper and Sulphur Company's reports from Capt. Nance (who went from this country some months ago to take charge of this company's mine) are so favourable with regard to the extent of the copper ore deposits that the directors have concluded contracts for rock boring machines, with all the necessary plant. This will enable the company to prosecute operations vigorously, and thereby obtain a much greater and more rapid output than is possible under the present system of working.

At the Santa Cruz Sulphur and Copper Company extraordinary general meeting yesterday (Sir F. C. Knowles, Bart., in the chair), the resolution to wind up the company was confirmed. Col. W. M. Cochran and P. Carnegie were appointed liquidators.

The Mysore Reefs Company's offices have been removed to Bishopsgate-street, and Mr. Hugh W. Tulloch has been appointed secretary in place of Mr. R. Hodson, deceased.

The Peruvian Bondholders' Committee have received a telegram from Mr. Procter to the effect that the Chilean Government have revoked the decree of Mar. 2, 1880, and have issued a fresh decree declaring that they have determined to sell the guano themselves, and will divide the proceeds arising from the sales with the creditors of Peru having a charge upon the guano; that they will refer the question of priorities to arbitration to decide which creditors have a special hypothecation of the guano, the arbitrators to be appointed by the creditors.

The New York Pennsylvania and Ohio Railroad Company announce the payment on and after Mar. 1 of the coupons due on that date on the 6 per cent. Prior Lien Bonds at the offices of the London agency, and at the Farmers' Loan and Trust Company, New York. The estimated traffic receipts for the fourth week in January amount to \$18,426, against \$17,526, showing an estimated decrease of \$900; and for the first week in February \$102,951, against \$94,304 last year, showing an estimated increase of \$1847.

**GAS SHARES.**—The principal business in these shares, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, has been—Bombay (Limited), 5½; British, 3½; Buenos Ayres, New (Limited), 7½ to 8; Continental Union (Limited), 24 to 24½; ditto, new, 1853 and 1874; Gas Light and Coke, A. (Ordinary), 17½ to 17¾; ditto, 4 per cent. debenture stock, 103; Imperial Continental, 183 to 184½; London, 195 to 197; Monte Video Gas, 14; Rio de Janeiro, 25½ to 25¾; South Metropolitan, B, 176. Gas stocks idle, and no change. For closing prices see list on the last page of Journal.

**INSURANCE SHARES** have, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, been dealt in as follows:—Alliance, British and Foreign, 36; City of London Fire (Limited), 1½ to 1¾; City of London Marine Corporation, 1½ to 1¾; Commercial Union, 23 to 24½; Eagle, 6¼ to 6½; Guardian, 72½; Fire Insurance Association (Limited), 3½ to 3¾; London and Staffordshire Fire, ½; London, 52½ to 53½; London and Lancashire Fire, 4½; London and Provincial Fire, 7½; Merchant Marine (Limited), 1½; Oceanic, 8½ to 9½; P & O, 30; Railway Passengers, 7½; Universal Marine (Limited), 8½. Marine insurance steady; others flat. For closing prices see list on the last page of Journal.

**TRAMWAYS.**—The closing prices of this evening, as quoted by Mr. W. Abbott, of Tokenhouse-yard, are given in tabular form in the last page of Journal.

**RAILWAY AND GENERAL MARKETS.**—Referring to the course of business done to-day during official hours (11 to 3) Mr. Ferdinand R. Kirk, 5, Birch-lane, writes:—*Opening:* Yesterday Hudson Bay shares reached 32; they are now 31½. Gas Light and Coke, A. (Ordinary), 17½ to 17¾; ditto, 4 per cent. debenture stock, 103; Imperial Continental, 183 to 184½; London, 195 to 197; Monte Video Gas, 14; Rio de Janeiro, 25½ to 25¾; South Metropolitan, B, 176. Gas stocks idle, and no change. For closing prices see list on the last page of Journal. *Closing:* Spanish are now close upon 26½, and Turkish Fives 11½, United being 65½. Great Western are nearly 1½ higher. Richmond, 10 to 10½; Parys Corporation, 11s. to 11s.; Devon Consols, 7½ to 8; New Kitty, 2 to 2½.

**MESSRS. FINLEY AND ABELL.—GOLD:** There has been no revival in the demand for export, and all arrivals flow into the Bank. The amounts to hand since our last circular make a total of 984,000½, and there have been no withdrawals. We have received 61,000½ from Melbourne, 399,000½ from New York (exclusive of 317,000½ for Italy), 40,000½ from the West Indies, 34,910½ from the Brazils, and about 400,000½ from the Continent, in Dutch gold and sovereigns, equal to 934,910½. The Australia takes 40,000½ to Bombay. **SILVER:** Since our last the price has fractionally advanced, and may now be quoted at 52½ per ounce standard. The arrivals have been very small, and comprise only 52,000½ from the West Indies, and 32,000½ from New York, equal to 84,000½. The Britannia, from Chili, is reported to have 69,000½ on board, but the details are not yet known. The Australia takes 75,500½ to Bombay. The Tanjore has taken 40,000½ silver from Venice to India.

LEAD ORES.				
Date.	Mines.	Tons.	Price per ton.	Purchasers.
Feb. 14—	Lisburne .....	70 .....	£11 2 6 .....	Sheldon, Bush, and Co.
—	ditto .....	6 .....	8 15 0 .....	ditto
—	Croftswell .....	30 .....	12 7 6 .....	Panther Lead Co.
—	East Darren .....	20 .....	9 13 0 .....	Sheldon, Bush, and Co.
—	Roman Gravel .....	20 .....	9 11 6 .....	Walker, Parker, and Co.
—	East Roman Gravel .....	20 .....	9 11 6 .....	Sheldon, Bush, and Co.

BLENDE.				
Date.	Mines.	Tons.	Price per ton.	Purchasers.
Feb. 16—	East Roman Gravel .....	20 .....	£2 0 0 .....	Vivian and Sons.

**COED-Y-FEDW AND PANT-Y-BUARTH.**—An important discovery is announced here at the 107 west. Further good news is expected.

**GREAT HOLWAY.**—The various points in the mine have improved. Another parcel of lead has been sold, assaying for silver nearly 15 ozs. to the ton. The returns will now steadily increase.

**ARENDAL.**—The following are the principal valuations of the lode according to the latest advices:—Brown's shaft is worth 7 tons of copper ore per fathom; the winze below the 75 ft. level, 4 tons; the 60 east, 3 tons; the new shaft at Sletné, 3 tons; the 60 east at Bolstad, 2½ tons; and the 60 west, 2½ tons. The mines are said to be looking better than they have done for the past two years, the richest lode being in the shaft from the 75 level to the bottom (87 fathoms), which is most important. At the new shaft at Sletné there is a fine course of ore, and in a few weeks they will cut the new lode at 50 fathoms deep.

**BRATSBURG.**—The managers' monthly report will be found in another column, and, it will be seen, is most favourable. The mines continue to open out on a rich lode, the various points being valued at nearly 2500 per fathom in the aggregate, and other places are soon to be resumed in a good lode. We understand that the ore broken is estimated at worth more than 5000½; the company having taken possession only on October 31 last. The above refers to the only one of the mines yet being worked, but when even it is in full operation with the new machinery much larger returns will be made, while the present yield a good profit. The surface works progress well, the weather being very favourable.

**DEVON FRIENDSHIP.**—The 30 east is improving, and in a rise above the 30 just begun the lode is worth 1½ ton of copper ore and 6 tons of arsenical mundie per fathom. They sell this week 4½ tons of tin.

**EAST ROMAN GRAVELS.**—This mine continues to look exceedingly well.

**EUREKA (NEVADA) SILVER.**—Good progress has been made in these mines (Bald Eagle). During the week the drift from the 150 feet level having been advanced 12 ft. in low grade ore and iron, while stop A has been entirely cleared of waste, and work con-

tinued on the vein of ore, which is now 6 in. wide. The usual shipments have been made from the Williamsburg.

**SOUTH CARADON.**—At the meeting held at the mine on Wednesday the accounts showed an expenditure of 6736½ on the three months working, and sale of ores 6768½, leaving a profit of 32½, which was carried to the balance now in hand of 1783½. It was decided to form a Limited Liability Company with a capital of 100,000½, in shares of 1½ each, to provide additional capital for working new ground lately granted to the present company.

**PRICE OF TIN AND TIN MINES.**—Shareholders in tin mines should hold on to their interests, for as soon as money is cheaper, and Bank rate is reduced, which is likely to take place next week, there will be a great rise in the price of tin, and probably before long, a well-informed correspondent says, of some 20½ per ton.

**COPPER MINES.**—The "bears" of copper have been hard at work all this week in getting copper down, but the latest information we get is that next week the incoming "bulls" may have their turn, and a rapid rise set in next week. The next Board of Trade Returns, it is expected, will show much better results than for a long time past.

**LEAD MINES.—LEAD TRADE.—IMPORTANT INFORMATION.**—The demand for lead this week has been in a considerable increase of that for several weeks, and a great rise is now confidently expected, and our home lead mines, as well as importers of lead, will be to blame to sell pig-lead at existing prices. It is stated this week that nearly all the brickmakers round London had such an enormous demand on them for bricks that they are almost cleared out of stocks. The demand for house and manufactory buildings is such as has not existed at this season for many years past. There cannot, therefore, be any longer any doubt but we are on the eve of a great rise in the price of lead, not only for home consumption but for export likewise. This is good news for lead mine shareholders. The stocks of lead are now greatly reduced, and imports decreasing.

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ARE BUYER OF

LEAD ASHES SULPHATE OF LEAD, LEAD SLAGS, ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &c and DROSS or ORES containing COPPER, LEAD, AND ANTIMONY.

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MINING ENGINEER,

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Mines inspected and reported on. Assays and valuations effected Has on hand offers of Mines of Copper, Calamine, Blende, Phosphat of Lime, Tin, Lead, Iron, Manganese, and Manganiferous Iron Ores.

#### LA PLATA MINING AND SMELTING COMPANY.

The Directors have appropriated \$20,000 from the profit realised in January to the PAYMENT of the 30th consecutive MONTHLY DIVIDEND, at the increased rate of 12 per cent. per annum on the capital of the company.

Dividend Warrants will be issued for all shares on the London Register on 22nd instant. F. ANDREWS, 21, Great Winchester-street, E.C., London, Feb. 17, 1882.

**CAPITAL (£2000 to £5000½) REQUIRED for a LEAD MINE in the best district in WALES.** Can be advanced in one or several sums, and by degrees if preferred.

Address, "Argent," care of Messrs. G. Street and Co., 30, Cornhill, E.C.

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(COLEMAN'S).

A DELICIOUS BEVERAGE AND TONIC.

IMPORTANT TESTIMONIAL.

Queen's Crescent, Haverstock Hill,

London, March 5th, 1881.

DEAR SIR,—Some time since, being greatly fatigued with overwork and long hours at business, my health (being naturally delicate) became very indifferent. I lost all energy, strength, and appetite, and was so weak as to be scarcely able to walk.

As you are aware, I sent for a dozen of your Extract of Meat and Malt Wine, which, in a few days, pulled me up marvellously. Three or four glasses of it daily have quite altered and restored me to better health than ever, "without the assistance of a doctor."

I am now giving it to my son, twelve years of age, whom we have always thought consumptive, and from a puny ailing boy he seems to be fast growing into a strong healthy lad.

Enclosed you have cheque. Please send me two dozen of the "Extract." With thanks for your prompt attention to my last letter.

I am Sir, yours truly,

GEORGE A. TYLER.

Pints, 30s.; Quarts, 50s. per dozen. Carriage Paid to any Railway Station. Sample Bottle sent for 3d stamps.

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Sold by all Druggists in Bottles 2s. 9d. and 4s. 6d. each. Ask for Coleman's Liebig's Extract of Meat and Malt Wine, and "See that you get it."

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### Notices to Correspondents.

Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt; it then forms an accumulating useful work of reference.

**LEAD PRICES AND PROSPECTS.**—"Zero" (Newcastle-on-Tyne).—If you are misled by such reports it is your own fault. It is well understood that the Editor is not responsible for the opinions of correspondents who sign their letters, and are frequently interested parties with regard to the subjects on which they write. The remarks in last week's Journal of which "Zero" complains were, however, perfectly accurate, and in every respect justifiable.

**PEAT COMPRESSING MACHINERY.**—"S. C." (Wolverhampton).—Any of the manufacturers of brick-making machinery will supply machinery suitable for the compressing of peat. All the machinery yet tried for the purpose has failed, not from any defect of the machines, but from the fact it is only certain qualities of peat—that naturally dense and free from fibre thicker than a blind cord—that can be usefully compressed without costly preliminary manipulation, which makes the attainment of profit impossible.

**CANADIAN COPPER AND SULPHUR COMPANY.**—I notice in my communication to you of last week rather an unfortunate clerical error has been made. It appears that the shares are 4s. fully paid; it should have been 4l. These shares are now selling at 24s. 6d. to 25s., very much below their value; and as the last report from the mine was very good, I have no hesitation in saying that any one buying now will double their money within three months. —ESKIN.

**GOLD EXTRACTION.**—"J. B." (Glasgow).—It has not been announced in the Journal that Mr. Readwin is in any way concerned in the promotion of the Dulcamara Anglo-Indian Gold Extraction Company. The processes no doubt resemble each other in so far as the mercury is manipulated in both cases; but that is all. Mr. Readwin has not stated that gold is in his case the mercury improved used, nor that it may be a yellow metal of a cheaper kind.

**NORDEL'S BLASTING GELATINE.**—Can any correspondent inform me, through the Journal, where I can obtain Major Ford's report on the accident at the Deep Level, Halkin, North Wales, that took place some time at the latter part of last year with Nordel's patent blasting gelatine?—B. : Millom.

**NOUVEAU MONDE.**—"W. H. F." (Chislewick).—You will probably find all the information you require in the report of the Nouveau Monde Company meeting, published in last week's Mining Journal. If shareholders do not take the trouble to attend the meetings they will naturally have difficulty in keeping themselves properly acquainted with what is going on with regard to the concerns in which they are interested.

**OLATHE SILVER MINING COMPANY.**—We have received various newspapers, and two communications, from Leadville, respecting this company. The statements made are of such an extraordinary character that we should think the parties concerned would publish some authenticated explanation or refutation. No gentlemen could rest under such fearful imputations.

**Received.**—"F. J. H." (Wheat Coast).—"F. S. C."—"J. N. D."—"Ajax" should apply to the broker through whom he purchased the shares—"G." (Richmond).—"A. Holder of 170 Shares" (Richmond). We should think you have adopted the right course—"Old Reader" (Dublin). We hope to have some information in a week or two—"W. F. H." (Wadebridge).—"W. S."—"E. P." (Mold). The report reached us on Saturday morning, after the Journal was published.—"R. S." (Truro).—"Shareholder" (Wheat Vor).—"Old Subscriber" (Neath).—"Shareholder" (Glasgow).

## THE MINING JOURNAL, Railway and Commercial Gazette.

LONDON, FEBRUARY 18, 1882.

### THE EMPLOYERS' LIABILITY ACT.

MR. BURT has brought in a Bill to amend the Employers' Liability Act, so as to render it compulsory, and that there shall be no power to contract out of it. The Act has been in operation for a year, and in many places the masters and men have agreed to work outside of it, and in no instance has there been any complaint made against the arrangements come to. In some districts the miners have adhered to the Act as it was passed, and in many others the contrary has been the case, the mineowners subscribing largely to a fund that made provision not only for accidents but for sickness as well. In such cases the men are far better off than they would be were they placed under the Act. But Mr. BURT and those who are acting with him are evidently determined to give no liberty of action whatever to the working men, many of whom we believe will be found amongst the strongest opponents of the Bill brought in by the Member for Morpeth. No fault has been found with the Act as it stands, and why it should be altered so as to meet the views of those who are not likely to come inside of its provisions we cannot understand. In a few instances, such as that of the London and North-Western Railway Company, an attempt was made to force the men to contract themselves out of the Act, which at the time we considered was a most impolitic step. In other cases, however, considerable bodies of workmen have requested to be kept outside of it. The men at the extensive shipbuilding works of Messrs. JOHN ELDER and Co., on the Clyde, not only contracted themselves out of the Act at their own request, but formed a committee of their number to meet at their own expense all claims which any member might press upon their employers. In Lancashire the mineowners offered to increase their subscriptions in all cases from 15 to 25 per cent. upon the men's contributions, whether directly or indirectly employed by them. Mr. PICKARD, the miners' chief in Lancashire, was most favourably inclined towards the proposal, and considered that the society to which the payments were to be made was one of which the miners ought to be proud, when they remembered how many persons by it had been saved from becoming paupers. His opinion was that the adoption of the arrangement alluded to was really carrying into effect the spirit of the Employers' Liability Act. He estimated that not fewer than 30 per cent. of the persons employed underground in mines under the Act would have no remedy except against their fellow-workmen.

But as it is, during the year very few cases have been brought into the Courts where miners have sued mineowners for compensation, and we see in but very few of these have damages been obtained against employers. In such cases the unsuccessful litigants found that they were worse off than if the Act had never come into operation, for then they would have had the old mine club to fall back upon. In one district, where upwards of 30,000 miners are employed, and where the men did not contract themselves out of the Act, there was no litigation throughout the year, and although there were a good many accidents of a fatal character, more particularly from "falls," there could be no claim for damages against the employers, seeing that they were not by themselves or agents contributory to what took place. In another district the men, or at least a large proportion of them, subscribe along with their employers to a permanent relief fund, which makes provision for them in case of sickness or accident, and also provides for their families in case of death from any cause. Now, it will be very hard indeed if these men are not to continue in an association, and that their employers are not to subscribe to its funds, for such would be the result of making the Act compulsory, for a mineowner could not be expected to subscribe to a society and at the same time be liable for injuries caused to a workman whilst following his employment, by doing an act which is intended for his own safety. As an illustration of this, we may say that were a deputy in going his rounds to tell a man to set a prop, and the man in doing so was injured or disabled, the owner or owners would have to pay compensation. At the extensive ironworks and mines of the Staveley Company, in Derbyshire, where upwards of 5000 persons are employed, there is a fund started by the company with 2000l., and who also pay a certain percentage on the contributions of the men, by which ample provision is made in the case of sickness, accident, or death. Where a man is unable to follow his employment as much as 100l. has been given to him to start in business, and so maintain himself and family. In the event of Mr. BURT's Bill becoming law, then the Staveley Society would become extinct, so far as accidents are concerned, and it is not likely that the company would subscribe for the support of the men and their families in cases of sickness or death as they had previously done.

Such a course was proposed to be taken by Earl DUDLEY, who showed no desire to get out of the Act, but just before it came into operation gave notice that he would discontinue the provision he had made up to that time for his workpeople in the shape of medical attendance, sick allowance, funeral expenses, house coal, and the

weekly doles to the widows and orphans. This was strongly objected to by the miners, who held a meeting and unanimously asked to be allowed to contract themselves out of the Act. It is, therefore, plain that vast bodies of workmen, more especially miners, receive more benefits from their employers outside of the Act than they would do were it in force. This the men are well aware of, and they may well ask to be saved from their friends, who wish to force them under certain circumstances into doubtful litigation instead of a certainty obtained by agreement. We are, therefore, of opinion that whilst mineowners have nothing to fear from the Liability Act becoming compulsory between them and their workmen, the latter have an interest in maintaining it as it is. It may be said that the tenant farmers requested to have the Ground Game Act made compulsory, so that they should not be able to make any arrangement with the landlord, and this furnishes a precedent as regards the Liability Act. But there is a great difference in the two cases, for the miner is admittedly better off as he is at the present time than he would be were the Act made as stringent as some persons desire. There is every reason, also, to come to the conclusion, as we have said before, that the strongest opposition to Mr. BURT's proposal will come from the working men, especially miners. Consequently there is not much likelihood of the Act, which has already been the means of effecting a great deal of good, being altered in the direction which Mr. BURT and his friends desire, and it is a noteworthy fact that no one has presented a petition in favour of any alteration in the Act as it stands.

### OUR MINING AND METALLURGIC INDUSTRIES.

It is to be sincerely hoped that the new rules for the regulation of our parliamentary debates will become law during the present session. The tactics of the Irish obstructionists last session were, unfortunately, successful in seriously impeding business, and many measures of vital importance to the commercial and manufacturing industries of the kingdom were abandoned in consequence of the time occupied in discussing questions mainly affecting the welfare of our Sister Isle. There are, however, indications that the present Government (and they will be supported by all shades of politicians) are not inclined to allow the present session to be so frittered away, but are anxious that measures long since and urgently demanded in connection with our trade and industries shall receive due consideration, and if possible brought to a satisfactory issue without any further delay. There are inferences in the Royal speech which induce the hope and belief that our mining and manufacturing interests will not again be altogether shunted out of the parliamentary programme, and therefore it is that we urge those honourable members who are connected with our collieries and our iron and steel works and other staple trades to use all their efforts to secure the fullest discussion for the various measures which affect their interests.

It is not at all improbable that in connection with the bankruptcy laws, to which allusion is made in the Queen's speech, that stringent clauses will be introduced to discountenance and suppress the starting of what are known as "bubble companies," which are so inimical to sound and legitimate trading, and which have caused the ruin of thousands of persons, and the waste of hundreds of thousands of capital, which if profitably employed would have been productive of much good. Such so-called companies are for the most part got up by reckless adventurers, who have nothing to lose, and sometimes make large sums out of their speculations. The too credulous public are easily hoodwinked by the high sounding names attached to the prospectuses. These Limited Liability companies are not an altogether unmixed good in other respects. In too many instances the great object of the managing directors and the secretary is to make good dividends, and succeed in so doing for a few years by accepting low contracts and underselling, militating seriously against old established private firms, and reducing prices far below legitimate and remunerative profits. Such reckless trading thus cuts away the very foundation of sound trading, and jeopardises the reputation of private firms. Of course we cannot gainsay the fact that Limited Liability companies, when discreetly fostered and economically managed, have in many instances proved fairly successful, and have afforded the means for the productive employment of capital which otherwise would be lying idle in the coffers of the bank. The remarks we have made cannot, therefore, apply to these companies; but there is a tendency once more to start Limited Liability companies for all sorts of questionable purposes, the prospectuses of which are backed up with the names of high sounding officials. If, therefore, the new bankruptcy laws, or any independent measure, made it a misdemeanour, punishable with imprisonment, not only to directly promote, but also to attach a name to a fictitious prospectus, a most efficient check would be put to the formation of these "bubble companies," and a great boon would be conferred upon the commercial community generally.

We stated last week that the Home Secretary, Sir W. Harcourt, received a deputation representing, it is said, every mining district in England and Wales, who urged with singular unanimity a series of amendments which they wished to be introduced into the Mines Regulation Act. The great object of the deputation was, of course, to secure greater safety in the working of mines. We stated last week that beyond the question of the immense expense which the various recommendations of the miners' deputation would entail, but little if any objection could be taken to those amendments; but it is another question whether it is discreet to seek further parliamentary enactments or enforce more rigid regulations. One would almost imagine that the colliery proprietors and mine owners are less anxious to prevent accidents and explosions and to save lives than are the miners themselves. With all the regulations and rules with which colliery operations are now hedged, and the working of mines surrounded, we may safely leave the means for the prevention of accidents to the colliery proprietors themselves, being assured that they will readily welcome any mechanical or scientific means for the prevention of these accidents, and be ready to carry them into effect with the least possible delay. If the miners themselves would second the efforts of the proprietors and managers, and be less reckless in their conduct, we should soon see a marked diminution of accidents, and consequently decrease in the loss of life. No number of Government Inspectors would altogether prevent explosions or accidents, and there is some weight in the argument that any large increase in the number of Inspectors would tend to decrease the responsibility of proprietors and managers—a policy of questionable utility indeed.

In all probability one measure of real value and practical advantage to one of our great centres of mining and manufacturing industries will be carried during the present session. We refer to the establishment of a scientific and technical college for Wales, with special reference to the instruction needed for the carrying on of the large and varied metallurgic industries of that important mining district. The necessity of such a college has long since been recognised by the Government, and the present movement is the outcome of the Royal Commission, over which Lord Aberdare presided with so much ability. The commissioners have recommended that the Government should establish such college in Glamorganshire, and a rivalry is being carried on at present as to which town, Swansea or Cardiff, should have the honour of being the locale of such a college. Cardiff has subscribed 20,000l. (10,000l. of which is the gift of Lord Bute) towards the erection of such college; whilst Swansea has offered a most eligible site of 20 acres, estimated by the Mayor to be worth at least 1000l. an acre. But whichever town is ultimately selected by the Government, the erection of such a college will be a great boon. In the advocacy of the claims of Swansea by Mr. H. H. Vivian, M.P., that gentleman said that a classical education was no doubt of very great advantage to those who had time and the means to go through the course; but speaking for himself as a business man he believed that success was chiefly due to two things—first a thorough training in the physical sciences, enabling him to deal with the whole of the metallurgic industries in the broadest possible sense, taking advantage of all new improvements in science; and modern languages, enabling him to launch out into trade with the whole world. A Government science school would indeed be a priceless boon for South Wales, for Swansea has been not inaptly termed the centre of the world in respect to its metallurgic industries.

It is unfortunately too true that at the present moment the great majority of our large metal works are managed by foreigners—Germans in large numbers, and Belgians not a few. It is a somewhat curious fact that amongst those who introduced the copper trade into South Wales in the time of Elizabeth, and especially many subsequent improvements in the manufacture or smelting of copper, we find the names of several Germans, or those then called Dutchmen. One of these was Ulrick Fosse (that very honest and skillful man), who lived at Neath, near Swansea, and also Joachim Gamme, who it is said was "able to kill all the corrupt humours that be in the nature of all o'r copp' ures, and thereby bringe out more copper than heretofore hath byn, and with lesser charge." Unfortunately for Englishmen and Welshmen, that which obtained in the days of Elizabeth still holds good to a very great extent in the present day, and many managers and overseers and those in authority in our mining industries are chemists or assayers, who have received their education in Germany. It is thus obvious that this scientific and technical education has been most seriously neglected in England and Wales, and a Government science college for Wales would be one of the greatest boons which could be conferred upon that important mining district; and this we hope to see cordially sanctioned during the present parliamentary session.

### THE IRON ORES OF CORNWALL.

So much interest has been shown in the mineral deposits of Cornwall, and so many companies have been formed for the purpose of working the copper, lead, and tin found so extensively in the county, that it appears somewhat singular that more attention has not been paid to the iron ores, which are of such great value, being amongst the finest hematites found in the kingdom. The Great Perran lode, in particular, is a remarkably fine one, and averages about 36 ft. in width for a course of several miles, the upper part consisting chiefly of brown hematite, due to the decomposition of the spathose ore which is met with before the sea level is reached. In his evidence before a Committee of the House of Commons Sir H. BESSEMER, with respect to the lode, said he was convinced there were millions of tons of spathose ore specially adapted for making BESSEMER steel, only requiring railway communication to develop it. Now, however, there is a railway from the iron centres to the ports of Par and Fowey on the south coast, and to New Quay on the north coast. A cubic fathom of the ironstone weighs about 16 tons, and if the lode is taken at only 6 fms. wide its yield for every fathom in height and length would be 96 tons of ore. This ore, one would think, should yield a very large profit, seeing that there is no depth to sink to it. The ore of the lode is comprised principally of white spathose, over which is a considerable quantity of fine brown hematite. Owing to the presence of magnesia the stone is liable to fuse if heated beyond a certain point, so that it has to be calcined at a low heat. At one mine, where the ore has been worked, it has been proved 70 fms. deep without showing any signs of giving way, excepting that other minerals become intermixed with it. The lode, however, is not regular in its width, for in some places it has been found to be not more than 1 ft. in width; but this is only as a rule for a very short distance, when it opens out again, the cause of the falling off being generally the intersection of another lode. Still, with such a thickness of the finest ore within reach it is certainly surprising that it has not been more looked after than it has been, seeing that, so great is the demand for hematite stone, that hundreds of thousands of tons of it have to be annually imported to this country from Spain although we have vast unworked deposits at home. Mr. PARKES, in writing of it not so long since to the North of England, says that the iron lode or deposit has for many years been known to exist, but it has not been worked until comparatively recently, former adventurers having only scratched about the surface of it, or sunk pits down to a few fathoms deep.

From these shallow workings, however, large quantities of stone, mostly hematite, have been raised and sold. But the ironmasters, we are told, have been somewhat prejudiced against the ore, in some measure owing to it having been injudiciously selected, and taken principally from the surface, where it is highly silicious. It appears that there are several mines working upon the lode, but the produce does not appear to be anything like what might be expected. The stone has been worked at about half a dozen places, but the quantity raised has been by no means large, notwithstanding the fine quality of the ore. A few years ago there were no less than 30 ironstone mines in Cornwall raising the brown hematite, the value of which in 1875 was estimated at 14s. per ton, whilst at present it seems very few mines are at work, more attention being evidently paid to the copper, lead, and tin. Yet the brown hematite gives an average of something like 54 per cent. of metallic iron. In 1874 the quantity of iron ore raised in the Duchy of Cornwall was 45,005 tons, of the value of 34,076l., but since then there has been a rapid yearly decline, the returns for the last two years showing a comparatively small output, although the dues only reached from 6d. to 9d. per ton, and the cost of raising from 3s. to 4s. 6d. per ton. According to Mr. PARKES there are six mines where the Perran lode has been worked, and of these he has given us some interesting information in one of his papers. Of the Gravel Hill Mine, which in one year raised 2500 tons of ore only, we are told that nearly the whole of the surface of the sett is covered with sand-hills, principally the detritus of sea-shells, and these are so light that they are blown for miles inland, the Church of St. Piras in the locality having been enveloped in sand to such an extent that it had to be pulled down and built inland. The workings consist of an adit driven in from the base of the cliff by the side of the lode, which intersects it at about 60 fms. in from the cliff. Another mine in that known as the Mount, at which two or three openings have been made, and from which many thousands of tons of ore have been raised, nearly all of which has been brown hematite, the workings not having been taken down low enough to reach the spathose ore. The ore by analysis has given 52.91 per cent. of metallic iron, and 2.36 of manganese. The Deer Park Mine appears to be well situated, being at the most easterly point at which the Perran lode has been opened out, and one would think could be worked so as to realise a good profit. It is near to the East Wheal Rose and Shepherd's Lead Mines, the former of which has been such a profitable concern, as indeed has been the other one as well. There are three lead lodes at Deer Park, and the iron ore as well. At one pit the lead lode comes in contact with the iron ore, which has been found so much impregnated with lead that it was found to pay to stamp it by hand for the lead solely. The opinion prevails, however, that the iron lode will die out as it goes down and then give way to the lead. From the iron lode we are told that about 10,000 tons of ironstone were raised by a company that worked the mine, and which was quarried from openings of from 3 to 4 fms. deep, but a large quantity of it was largely impregnated with lead ore.

From the Duchy Peru Mine a good deal of iron ore has been raised, as well as copper, sulphur, and blende. The Great Retallack Mine now raises both lead and zinc, and iron has also been raised at it, but we believe that no ironstone is now being raised from it. At the Treumble Mine the brown hematite crops out at the surface, and the white spathose is seen at the bottom, the lode being worked by means of an open quarry. At the Duchy Peru, from which both pyrites and zinc are obtained, there is a shaft sunk down to what is known as the 40 fm. level, at which point the ironstone is of an excellent quality, being free from all impurities, whilst stones of white spathose were met with at the bottom of the shaft. The Great Perran lode may be said to bear about 35° north of west, and bunches of the ore are found where it is crossed by the north and south lead lodes. The iron ores of the Silurian and Devonian systems, as a rule, assume greater regularity in mode of occurrence than is found to be the case in the earlier rocks. In the Devonian or Old Red Sandstone it has been computed that the quantity of iron amounts to something like 1,000,000 tons per acre, and some of the spathose ores in Devon have been found to contain 72 per cent. of the peroxide of iron and about 14 per cent. of the peroxide of manganese, the other constituents being silica, alumina, magnesia, phosphoric acid, &c. Seeing that so little attention of late years has been paid to the fine ores in Cornwall we have been induced to notice them at a time when the



demand for hematites is much greater than it has ever been, our own known resources being unequal to meet the requirements of our iron and steel makers.

### COAL IN FRANCE.

The imports of coal into France appear to have sustained a certain check last year, while the exports of coal from France in 1881 were larger than in either of the two previous years. These two circumstances combined together sensibly reduced the excess of imports over exports which represents the effective consumption of foreign coal by the French year by year. This will be seen when we state that the imports of coal into France in 1881 were 8,106,761 tons, while the exports from France last year were 724,885 tons, the balance representing the excess of imports over exports being thus 7,381,876 tons. In 1880 the corresponding figures stood thus:—Imports, 8,451,129 tons; exports, 546,455 tons; excess of imports over exports, 7,904,674 tons. The dependence of the French upon their neighbours for the coal which they require for domestic and manufacturing purposes would seem to have been reduced last year, as factoring with 1880, to the by no means important extent of 522,798 tons. The importance of the change indicated by these figures is, however, reduced when we come to make a similar calculation with reference to 1879. In that year France imported 7,662,385 tons of coal, while she exported 513,938 tons, leaving an excess of imports over exports of 7,148,447 tons. It would thus appear that when we extend the comparison of 1881 to 1879 the reduction of the dependence of the French upon their neighbours for coal which was shown when the review was restricted to 1881 and 1880 vanishes altogether, the balance of exports over imports having been 233,429 tons larger in 1881 than it was in 1879. The diminution in the imports of coal into France in 1881 and the increase in the exports of coal from France in the same period are probably attributable to the progress made in coal mining in the north of the French Republic last year. Thus the coal production of the Pas-de-Calais amounted in 1881 to 5,320,616 tons against 4,844,323 tons in 1880, showing an increase of 476,293 tons last year. The coal production of the Nord declined, on the contrary, last year to 3,668,733 tons as compared with 3,701,589 tons in 1880; but even after allowing for the small diminution observable in the production of the Nord, the general extraction of these two important basins was 8,989,349 tons in 1881 against 8,545,912 tons in 1880, showing a final augmentation for the year of 443,437 tons. It was this increase in the coal production of the North of France which no doubt stimulated deliveries of French coal to Belgium in 1881, while, of course, there was more French coal also available for home consumption. The progress of coal mining in the Pas-de-Calais is one of the most remarkable features of French mining industry during the last 30 years. In 1850 there was scarcely a ton of coal raised in this district, while it is now steadily growing in importance as a coal basin.

It will be interesting to analyse the imports and exports of coal into and from France in 1881. The respective tables were made up as follows:—

	Imports.	Exports.
England..... Tons	3,142,396	Tons
Belgium.....	4,041,770	140,472
Germany.....	919,659	—
Switzerland.....	—	84,077
Italy.....	—	178,566
Other countries.....	2,936	321,770
Total.....	8,146,761	724,885

It is of some importance to note that while the imports of coal into France declined in 1881, the imports of coke presented a considerable increase as compared with both 1880 and 1879. In 1881 Belgium forwarded 902,771 tons of coke to France, Germany 190,407 tons, and other countries 17,796 tons, showing an aggregate of 1,110,974 tons for the year, as compared with 943,416 tons in 1880, and 760,329 tons in 1879. The exports of coke from France last year were 24,514 tons, as compared with 40,905 tons in 1880, and 20,589 tons in 1879. It follows that the excess of the imports of coke into France over the exports from France last year was 1,086,460 tons, while the corresponding excess in 1880 did not exceed 902,510 tons. The increase of the consumption of foreign coke in France last year which these figures indicate was, of course, not altogether without influence upon the French consumption of foreign coal in the same period.

### THE DIVIDEND MINES OF 1881.

BY EDWARD ASHMEAD, F.C.A.

The Annual Table relating to the Metalliferous Mines of 1881 worked by public companies, Limited and Cost-book, will be found on page 186 of this day's issue, making the sixth year that similar tables have been contributed to the *Mining Journal*. In the past year dividends have been declared by 25 British and 24 Foreign mine companies, as against 32 British and 26 Foreign in 1880. Referring in the first instance to the British section, it will be seen that the 25 companies whose united capital amounted to 890,326 $\frac{1}{2}$ l., declared in 1881 dividends a total sum of 139,508 $\frac{1}{2}$ l., equal to 15 $\frac{1}{2}$  per cent. for that year. In the preceding year (1880) the figures were 1,139,341 $\frac{1}{2}$ l. capital, 210,651 $\frac{1}{2}$ l. dividends, and 18 per cent. The year 1881 in the British mines was, therefore, much below that of 1880, although considerably above that for 1879. The falling off in the total dividends in 1881 is the more noticeable, considering the activity that prevailed in Devon and Cornwall, generally regarded the special mining counties of the kingdom, and which it was well known, as regards the old established tin mines of Cornwall—were giving very profitable results throughout the year. The decrease in the total dividends for the year 1881 compared with 1880, will be seen by the following figures:—

	Tin mines.	Copper.	Lead and blende.	Total.
1880.....	£103,980	£29,350	£77,321	£210,651
1881.....	88,692	9,036	41,780	139,508

Decrease... £ 15,288 ... £20,314 ... £35,541 ... £ 71,143

A decline in the tin mine dividends could hardly have been looked for, particularly as the average price realised for black tin, as sold by the mines in 1881, was above the average of 1880.

An examination of the table will show that one or two mines have fallen off in productiveness last year, which fall off has not been made up by other mines, such as Carn Brea, Tincroft, Wheal Grenville, &c., re-entering the Dividend List. It should be remembered that tin made the greatest advance during the latter months of last year, and this would not tell on the dividends until the early part of this. Copper mines for dividends seemed to have declined to their lowest, Devon Consols and South Caradon being absent in 1881 from the List. Lead and blende gave each a lower metallic average in 1881, compared with 1880, and the drop in price has prevented some half dozen mines from declaring dividends, although earning sufficient to carry on their work with full vigour. It will be seen that of the dividends declared last year 15 were from "Cost-book" and 10 from "Limited Liability" companies. The advocates of the former system can scarcely draw any favourable argument from this fact alone, as four years back when lead was high and tin low, the proportion was the reverse.

There is one part of the table worthy of a passing remark, and that is the column showing the rate of dues. The greatest diversity exists on the part of landowners in fixing these heavy burdens on the backs of those who develop mines, too often only for the lords' benefit. It must be remembered that dues are paid not on profits, but on the gross raisings, and for mining rights merely. Damage done to surface being otherwise paid for. It is no unusual thing for mines to go on for years raising mineral annually, but at a loss—the deficiency required being made up by calls on the shareholders, the companies all the while paying dues regularly. In the Dividend List now under consideration, the dues vary from  $\frac{1}{2}$ l. in Great Laxey for lead, to 1-36 and 1-48 in Cornwall for tin. Of the 649,736 $\frac{1}{2}$ l. value of the gross raising of the 25 British dividend mines of 1881, nearly 40,000 $\frac{1}{2}$ l. was paid to lords for dues, against 139,508 $\frac{1}{2}$ l. to the shareholders in dividends, the remainder representing the working cost expended in labour and materials, &c.

The dividends in the foreign and colonial list for 1881 shows a fair

advance on the previous year, 24 companies having paid 929,658 $\frac{1}{2}$ l. against 26 companies paying 861,531 $\frac{1}{2}$ l. in 1880. By far the larger part of this was paid by four companies alone, the Tharsis and Rio Tinto running near upon each other, paying on their share capitals 284,165 $\frac{1}{2}$ l. and 225,000 $\frac{1}{2}$ l. respectively, Richmond (silver-lead) paying 162,000 $\frac{1}{2}$ l., and the Cape Copper 80,000 $\frac{1}{2}$ l. The united share capital of the 24 dividend companies of 1881 give a total sum of 7,558,889 $\frac{1}{2}$ l. The total dividend of the year on this represents nearly 12 $\frac{1}{2}$  per cent. Indian companies are to this date *non est* as to mining dividends. "The survival of the fittest," it would seem, is now the question among them. One Indian company, fortunate in the sale of part of its property, divided the proceeds, which cannot be considered a mining dividend.

**SAFETY LAMPS AND MINING EXPLOSIONS.**—In a recent article in the *Journal* on the causes of explosions in mines we noticed what we considered an important omission in the evidence given generally at all enquiries relative to the deaths of persons by explosions of gas. We pointed out that an open lamp would easily lead to the ignition of gas, and that a man going to work at midnight, when there was no official in the lamp-room, in all probability would take a lamp contrary to the Act of Parliament, which requires that each lamp before being given out shall be examined by a person specially appointed for the purpose. This statement of ours has not been without effect in the direction we intended, for it bore good fruit at the enquiry held a few days ago as to the cause of the Abram Colliery explosion, when the importance of the lamp question, if we may so call it, turned out of some importance. On going to work late at night it appears that the duty of looking to the lamps was left to the hanger-on, who not only examined them but re-lighted them when such was necessary. But the key used for the purpose of locking and unlocking the lamps was left hanging by a nail to the side. It is, therefore, not at all surprising to find from the enquiry that one of the lamps that had been used by a miner who was killed was unlocked. One of the witnesses who escaped said that he tried his place, when he found a little gas in it, and his lamp went out about nine o'clock. He then went to the pit-eye and got another, using the key which was hanging there. "No one," he said, "saw him lock his lamp, nor did any one look at it before he went back." The witness, on being asked by a juror if he was aware that he could have been sent to prison for acting as he had done, replied "Yah; but there were men paid to do that work." We think this fully bears out what we have stated as to the importance of examining witnesses as to whether the Act of Parliament has been complied with as regards lamps, which we find on the first occasion that the question has been put was not the case. We do not take any credit to ourselves for having brought under public notice a serious omission in the taking of evidence, seeing that it is the duty of all persons to aid in every way in eliciting information likely to show how explosions in mines are caused with a view to their prevention. But the point having been raised at the Abram enquiry, we trust it will not be overlooked in any future inquiries that may be held for the purpose of tracing the causes of any explosions which may occur.

**TACQUAH GOLD MINES (TAMSOO-MEWOOSOO).**—The following was received by the last West African mail from the agent at Tacquah, Jan. 4:—"I have called upon the workmen at Tamsoo to empty the shaft from the lode, in which samples (1 $\frac{1}{2}$  cwt.) were sent, assayed by Messrs. Johnson and Son, showing 6 ozs. of fine gold to the 1 ton of ore, so as to go down and inspect. I have report of another kind of lode (yellowish) which is richer, and I am, therefore, engaging another set to sink another shaft. I have kept the third of the lode extracted, from which samples were sent, and I will keep all that can be extracted for the company. The native workmen employed until the company's regular shaft begins to work take two-thirds of the ore extracted instead of money pay, leaving the other third for the proprietors, now the Tacquah Gold Mines Company (Limited).

### HOUSEHOLD BOILER EXPLOSIONS.

The practical impossibility of rendering the so-called circulating house boilers free from danger has been so frequently demonstrated that it has been more than once proposed to absolutely prohibit their use by legislative enactment, and although from the succession of mild winters this much wanted measure has not yet been passed, the necessity of it has not been in the slightest degree diminished by the many inventions which have been brought forward in the attempt to lessen the number of fatalities inseparable from the use of boilers of this class. As the number of circulating house boilers in use is happily comparatively small, a brief description of the more common arrangements may not be out of place, and this can be readily obtained from a little pamphlet—*Household Boiler Explosions, their Cause and Prevention*—by Mr. Wm. Ingham, mechanical engineer, just issued by Crosby Lockwood and Co., of Stationers' Hall Court. By way of preface Mr. Ingham states that within the space of 10 days during January 1881 no less than 40 explosions of household and circulating boilers were recorded in the public papers, killing about a dozen persons and seriously injuring more than 20 others, and, he adds, that how many others may have happened which have not been heard of it is impossible to estimate. Taking only Mr. Ingham's recorded fatalities, however, it will be seen that the number and fatality of the explosions in kitchens during the period mentioned were greater than in the collieries of Great Britain, which are so loudly referred to as dangerous places of employment.

Numbers of persons, as Mr. Ingham truly says, knowing themselves to be in the vicinity of one of these terrible engines of destruction—a circulating boiler—exist in mortal terror during the frost; and he explains that many take the safe precaution of not having a fire at all in the kitchen so long as the frost continues; but he properly mentions that this is a reliable protection only if the fire be not lighted until some time after the frost is gone. It should be understood that in all these circulating arrangements the principle is the same. The boiler at the kitchen fire is tightly closed, two pipes connecting the boiler with a reservoir in the upper part of the house. One pipe extends from the top of the boiler to some distance above the bottom of the reservoir, the other from the bottom of the reservoir to near the bottom of the boiler. The theory is that the colder water from the reservoir being heavier than the hot water in the boiler, will descend through the second pipe, whilst the hot water should ascend through the first pipe. This action sometimes takes place, but the knowledge of that fact is scarcely a greater recommendation than the certificate that he was sometimes sober, which the Irish butler asked his employer to give him upon discharging him. So long as the boiler, the pipes, and the reservoir are full of water, and the pipes are quite free from obstruction, there is but little real danger if the apparatus be well and carefully constructed, but it often unfortunately happens in practice that the pipes get choked, especially with many kinds of water supplied for domestic purposes, that steam accumulates at the top of the boiler, indicated by the "popping" constantly heard, and that in time of frost the pipes become stopped with ice, and by preventing the free circulation of the water, quickly store up an amount of explosive force sufficient to cause those fatal explosions so constantly recorded, and which experience has shown that even the best constructed safety-valves are powerless to prevent.

Nothing less than the absolute prohibition of the use of circulating boilers can afford the protection which the public have a right to demand, for it is not enough to refuse to use these "terrible engines of destruction" one's self if the risk of having one's neighbours or neighbour's servants brought into one's premises among the debris of a neighbouring kitchen boiler is allowed to continue. Explosions of circulating house boilers are too often ranked among unexplained mysteries, although very little consideration would suffice to show that there is little mystery about them and that they cannot be prevented. The stoppage of a pipe for the shortest time, whether by deposits from the water or from the accumulation of ice, will in all probability lead to a fatality, because a boiler of the most ample strength to resist any probable pressure whilst full of water will go

to pieces like an eggshell under the pressure of steam which is inevitable in case of stoppage. It has sometimes been pretended that if ice were accumulated in clean pipes the steam would naturally melt it, so that if the pipes be kept clean all will be well. But there can be no more fatal error. An extremely small quantity of air between the steam and the ice will most effectually protect it from the greatest heat that the steam can be brought to. This is evidenced by a fact well known and utilised by every chemist, who will not hesitate to hold a small glass test tube in his naked fingers whilst he boils a liquid within it. All that is necessary is to place the finger firmly on the top of the tube before submitting the closed end to the flame; the confined air will be compressed near the finger as the liquid increases in temperature, and the compressed air will be so cold that even the boiling liquid at the bottom of the tube will not make the upper end inconveniently warm. There would be ample air from the water in a choked circulating boiler to supply the necessary compressed air cushion, and the removal of very little water from the boiler would then suffice to create sufficient steam space to produce a fatal explosion. Mr. Ingham has evidently well considered the subject, and has made all the suggestions that can be regarded as necessary in order to mitigate the evil pending the prohibition of circulating boilers.

### COLLIERY EXPLOSIONS.

The northern coal field is usually very free from fatal explosions, although the quantity of gas given off from the coal is as great as in other districts; but on Thursday afternoon a dreadful calamity occurred at the Trimdon Grange Colliery, near Hartlepool, by which it is feared 60 or 70 lives have been sacrificed. The colliery, which is owned by Mr. Walter Scott, employs about 300 men and boys, and nearly half that number were in the Harvey seam where the explosion occurred at the time of the accident. The first intimation of the explosion to those on the bank was a loud report and a simultaneous outburst of flame and rubbish up the Harvey shaft. The resident viewer, Mr. W. Wood, accompanied by John Lawrence, fore overman, Mr. Cook, underviewer, and other officials hastened to the pit bank, and as speedily as possible organised means for the relief of the sufferers. The cage was found to have been jammed some 30 yards from the bottom of the shaft, and therefore fully half an hour's delay took place before a kibble could be rigged for the rescue party to descend. This was done with all possible speed, the gentlemen named being the first to descend.

The explorers reached the Harvey seam by the Low Main shaft, and by 4 o'clock effected a communication with the High Main, and a dozen or so were brought up all alive, but suffering more or less seriously from after-damp. Dr. Russell was soon on the spot, and under his superintendence the poor fellows were removed to their homes, and appear generally to be in a fair way of recovery. After this the work of rescuing the imprisoned men proceeded only slowly, owing to the debris encountered by the exploring party. Unfortunately little doubt is entertained that many lives are sacrificed and several horses killed. Robson states that when the explosion occurred he and four companions were sitting down. They were blown down senseless. He afterwards managed to crawl towards the shaft, but was blocked by the rubbish, and remained until found and brought to the bank comparatively uninjured. Everything possible is being done to facilitate further rescues, and experienced men from other collieries continue to arrive hourly. A remarkably sad feature of the explosion was that the afterdamp was driven into the workings of the Kelloe Colliery, two miles distant, through some old communication, and the result has been the suffocation of an underviewer, and at least three others.

On Saturday last an explosion, resulting in the loss of six lives, occurred at the Coedcae Colliery, in the Rhondda Valley. The colliery, which is the property of the Coedcae Coal Company, lies between Pontypridd and Porth, being about three miles from the first-named place. At seven o'clock two repairers, named Warlow and Thomas, went down in the pit carriage about 40 yards along the side of the pit. They then stepped out of the carriage on to a wooden structure erected at the pit side to clear some curbing, and do necessary repairs. It had not been deemed essential to carry the safety-lamps, and the men took naked lights. Suddenly there was a dull report, and the gas rushed out of a fissure into the pit. The two men were killed, the gas fumes overpowering them, and the wooden framing on which they stood caught fire. It was promptly resolved to go down to the stage where the deceased had met their deaths, and see what injury had been caused. The names of the men who undertook to go down were Williams, Rowlands, and James. The carriage was gently lowered, but the men had scarcely got 10 yards from the top when another report was heard, accompanied by a rush of gas. The unfortunate men experienced the full shock of the explosion, and all three were hurled aloft, and two falling back into the pit were almost instantly killed. Rowlands managed to grasp in his descent the pit guides, and clung to them for a short time. A helping hand was held out to him, and a rail was put across the pit's mouth to assist him, but a volume of dense poisonous smoke issued from the pit, and he fell dead. A collier named Williams, standing at the mouth of the pit, was killed by a piece of timber which was hurled out of the pit. A number of other men on the surface narrowly escaped with their lives, and received serious injuries. One man was blown into the pit, but he was caught by one of the beams, and so was saved.

### MINE INSPECTORS, AND MINE ACCIDENTS.

With reference to the recent deputation to the Home Secretary from the Miners' National Association, it has been stated that the whole system of inspection and inquiries is a sham. Periodically with every such deputation this stale assertion reappears. It is so utterly untrue, and is in fact such a gross libel on the whole body of Inspectors of Mines, as well as upon every colliery manager in the kingdom, that the North Star, an influential journal published at Darlington, in an interesting article upon the subject, emphasises the absurdity of it. Persons practically acquainted with the subject are well aware of its untruth, but the general public are apt to be misled by such statements. It is pointed out that to commence with the Inspectors, they are a body of gentlemen carefully selected for their practical and scientific training in the management of collieries and mines. It may be safely asserted that each Inspector is quite as cuts as most colliery managers, and often much more so. When a serious accident happens at a colliery it is the Inspector's duty to sift the origin of it if possible to the uttermost, and it is an easy matter for the Inspector to see if there is the slightest desire to withhold information. To do so now under the Mines Regulation Act of 1872 is very difficult, because at each colliery so complete is the system of individual responsibility that the precise condition of the mine up to the morning of the accident is open to the Inspector at any time in the daily signed records of examination. It is, however, to the credit of mine managers that cases are very rare where every facility is not given for the elucidation of the causes of accident.

It is imagined that accidents in mines can be entirely prevented, it is remarked, about as Utopian as to expect a cessation of shipwrecks. Every year the subject grows more complex, with the increasing depths at which our collieries have now to be worked. Sudden outbursts of gas are the greatest dangers which have to be grappled with, but the exact amount of this danger varies in different collieries. After referring to the relative fatality of the several classes of accidents, to the lighting of mines, and to inquiries, it is truly said in conclusion that further legislation over and above the Act of 1872 has not been demonstrated to be a necessity, at any rate it is premature before the Report of the Royal Commission is presented and carefully considered. If a case for further legislation can be proved, by all means let us have it; but the public must clearly note the difference between this and a chronic clamour got up by miners' delegates, to whom agitation is the breath of life, and who rely on this to keep them in good odour with their constituents.

**THE IRON TRADE.**—A meeting of the Cleveland Ironmasters' Committee, who have charge of the question of restriction in the make of Scotch and Cleveland pig-iron, was held on Tuesday in the Iron-



The second operation for producing the iron alloys is effected by melting the spongy products obtained as above described in a cupola or smelting furnace, in which they are introduced either by themselves or in alternate layers with iron ore, which may be more or less mixed with iron turnings. Thus alloys may be obtained of any desired proportions, as in the case of ferro-manganese, which may contain as much as 85 per cent. of manganese, and the alloys so produced may be termed ferro-carbides of tungsten, chromium, potassium, &c., as the case may be. When the reduction and cementation are effected in a crucible the sponge need not be withdrawn therefrom, but may be fused in it with the addition of iron or ferro-manganese. As an example of the proportions that may be employed, 22 kilos. of tungsten ore, or 14 kilos. of chromium ore, containing



45 per cent. of metal, with equal bulk of charcoal, and 60 grammes of prussiate of potassa or sal-ammonia may be mentioned. The third operation for applying the ferro-carbide alloys to the metal is effected by introducing them in the required proportions into the bath of metal in the Siemens-Martin furnace. The iron is melted at two heats. The first melting should be with charcoal and hydrogenous or any other known materials tending to assist the conversion into steel. Sometimes the sponge may be introduced directly into the bath without previous alloying. The introduction of the sponge or alloy causes development of great heat, so that the air supply must be reduced to save the furnace from destruction. The heat evolved causes elimination of most of the impurities, such as sulphur or phosphorus, by volatilising them, the substances which remain in the furnace being only those which can resist this elevated temperature, and which constitute the improved qualities of steel suitable for different uses according to the proportions of the ingredients, as may be understood from a few examples. A good steel for chisels, gravers, and the like was produced with pig-iron, 500; steel cuttings, 200; laminated puddled steel, 1530; pig, such as the St. Louis brand, 280; and ferro-carbide of tungsten, 30 = 2640 parts. The furnace was charged at 6 A.M., and run out at 5 P.M. A good steel for turning tools and files was produced with pig-iron, 300; puddled steel, 500; and ferro-carbide of tungsten, 40 = 840 parts. The dose of carbide could be increased, especially if hardness only be required.

The steel produced was analysed; the chisel steel gave—graphite, slight trace; carbon in combination, 0.835; silicon, 0.289; sulphur, 0.085; phosphorus, 0.063; and tungsten, 0.010. The file steel gave—graphite, 0.134; carbon in combination, 1.627 (= 1.761); silicon, 0.376; sulphur, 0.074; phosphorus, 0.082; and tungsten, 0.496. The large proportion of carbon, 1.761 in No. 2, shows that a very considerable quantity can be introduced in order to produce very hard steel besides the alloyed metals or metalloids, thus neutralising the bad effects of impurities, such as phosphorus, sulphur, and silicon. The steel produced, as described, seems to differ from ordinary cast steel only in the special character of the aggregation of the molecules, which gives the metal great hardness and tenacity, as shown by experiments, from which it appears that the steel untempered, having an average tensile strength of 78 kilogrammes per millimetre of section extended from 14 to 15 per cent., and that the tempered steel having an average tensile strength of 114 extended about 8 per cent. In a manner similar to that described other metal or metalloids may be alloyed with iron, such as aluminium, nickel, sodium, potassium, chromium, titanium, cobalt, and especially manganese or silicon, producing new qualities of steel. And such alloys, if they cannot be run as steel direct from the smelting furnace, may be run therefrom in such form that they can be employed in the Siemens-Martin or other furnace, or in the Bessemer converter in the production of steel.

#### SEPARATING LIME FROM MAGNESIA.

With a view to the separation of the lime and magnesia contained in dolomite, a process has been suggested by Mr. Stephen Cliff, of Wortley, Leeds, which consists in employing for this purpose the difference in the specific gravities of the different salts or combinations of lime (calcium) and of magnesium respectively. In carrying the invention into effect he uses either calcined or uncalcined dolomite, as may be desired, and he adds thereto sulphuric acid, any natural sulphate or sulphide, or any chemically or artificially produced sulphate or sulphide, in such proportions that the sulphuric acid or that contained in the sulphate or the sulphur compounds resulting from the roasting or otherwise treating the sulphide shall be sufficient to combine only with the lime (calcium) present in the calcined or uncalcined dolomite, appropriate heating and agitation, and water when necessary, being employed in the process; by these means sulphate or sulphide of calcium is formed, as the case may be. The specific gravity of magnesia being greater than that of sulphate or sulphide of lime, the magnesia falls down first, and the sulphate or sulphide of lime (calcium) afterwards. He then removes the sulphate or sulphide of lime (calcium) by any suitable means, preferring to do so mechanically or by decantation, or by a combination of both. When uncalcined dolomite is used the magnesium will fall down as a carbonate.

As the magnesia will probably not be free from sulphate or sulphide of lime (calcium), it may be again washed and allowed to settle as often as may be considered desirable to free the magnesia from the sulphate or the sulphide of lime (calcium) and other impurities that may be present. If desired, sulphurous acid or sulphurous compounds may be used in lieu of sulphuric acid. In this case the magnesia will fall as in the first, but the lime (calcium) will be in the form of a solution, which may be afterwards used or treated, as may be required.

#### THE FUTURE OF THE WYNAAD.

That much of the delay in the development of the Indian gold mines is due to natural obstacles not difficult of removal is now widely acknowledged, and during the recent visit of the Governor of Madras to the Wynaad many facts were brought forward which will guide those interested as to what is most required. In one of the petitions presented it was remarked that, the gold mining enterprise, which a short time ago it was considered by the experts would be restricted entirely to the Anshoms of South-East Wynaad near Deralva, has, during the past year, rapidly extended itself through South Wynaad, where many gold mining companies have already been formed; and it has recently been proved that the quartz lodes of North Wynaad are in many cases as richly auriferous, as the best veins in South-East Wynaad. Several gold mining companies are now being formed to work the auriferous quartz reefs in North Wynaad, and we are convinced that, if the results of the crushing of the companies already established in Colar and South-East Wynaad are as favourable as we confidently expect them to be, the gold mining enterprise will be firmly established in North Wynaad. Holding these views, we take this opportunity of trying to impress upon your Excellency the very great importance of providing for the wants of North Wynaad in any scheme that may be brought forward by your Excellency's Government, for improving the communications of Wynaad either by a railway or by tramways; the whole Taluq, and not only the south-eastern corner of it, now promises to develop into a most important gold field, and it appears essential that any railway or tramway scheme which may be projected by the Madras Government should provide carefully for the requirements of the whole Taluq, rather than for the most advanced portions of the gold-bearing area.

The advantages of a railway through Wynaad to connect Mysore with the Western Coast, both to imperial and local interests, are so well known to your Excellency's Government that we need not now do more than express the hope that it may be your Excellency's good fortune to see this railway completed during your term of office. Similar views were expressed in the petition of the Wynaad Planting and Mining Association, wherein it was remarked that the most important subject to which they would draw his Excellency's attention, is the proposed Mysore-Malabar Railway, the construction of which would make so material a difference in their prospects, that they beg its most earnest consideration at the hands of his Excellency. They were informed indirectly that the Mysore Government is most desirous, when funds permit, to continue its railway system to the Wynaad frontier, and the subject is one which, apart from local interests, is so important in an imperial view that they had strong hopes of enlisting his Excellency's sympathy with the scheme. To link the important Province of Malabar by a direct railroad with Mysore, would go far to ward off future famines from the latter country, whilst the trade which would naturally spring up between the Western Coast and Mysore would very large. They did not propose to name any particular route for the line of railway; but leave that for the decision of the skilled engineering staff in the Government employ, but would respectfully draw attention to the fact that their district is the most important one in its coffee and cinchona industries, and that those industries are yearly being enlarged; as a gold field, they may point to the number of mining

companies already established, and to the proved auriferousness of many of the private lands; and, lastly, they would draw his Excellency's attention to Major Mead's report on the Wynaad roads, and they asked for the better construction of the roads and bridges, and their better conservation; the speedy erection of a telegraph to connect this important district with the outer world; the granting of mining leases on a fair basis on Government land; the addition of a European force to the present police; the creation of Justice of the Peace; and the addition of a European ward to the hospital; and the placing of the control of the hospital in the hands of the local medical officer.

In his reply, his Excellency said: As to the railway across your country, I am as anxious as you can be, that, whether as a result of the negotiations now going on between the Home authorities and a private firm in London, or in some other way, the greatest of all your local wants may be supplied. . . . I have seen, and also felt, for that matter, the faulty construction and imperfect conservation of your roads and bridges. My friend Capt. Bagot and I might indeed be used as the temperance lecturer used his, by no means temperate, brother, as "shocking examples" of their defects, for a jolt, not much worse than many others, solved the continuity of the carriage in which we were travelling last Friday, and left us in a piteous plight enough. The extension of the telegraph is a mere question of time. . . . That there is gold in the Wynaad I can now testify from ocular inspection. That gold is present in paying quantities in many localities I am willing to believe. That much skill and not a few high qualities are enlisted in the development of our mines I am fully convinced. That you have an excellent set of miners I hear on all sides. But you have suffered, and will still suffer, from the operations of that class of persons who infest the great centres of commerce in the west, and who are to the armies of industry and enterprise as those camp followers who used to follow other armies, and gain for the legitimate combatant a bad name by robbing the dead and killing the wounded. That we may have in the future as little of such persons as possible in connection with your industry, is the best wish I can contribute to the prosperity of this beautiful and most interesting district.

#### INDIAN GOLD MINES—GREAT SOUTHERN MYSORE.

The action of Gibb against the Great Southern Mysore Gold Mining Company, decided by Mr. Justice Manisty, will afford an enormous protection to capitalists, since it will in many instances afford them some guarantee that the purchase money charged to a joint stock company really represents approximately the value of the property to be acquired. The present was an action for the rescission of a contract to take shares in the Great Southern Mysore Company, which was incorporated on Dec. 24, 1880, for the purpose of purchasing and working certain mining rights in the province of Mysore, Southern India. It appeared that the plaintiff had applied for and had allotted to him 2000 shares. He had paid a deposit of 250*l*. in respect of the shares, but now alleged that the prospectus on the faith of which he had been induced to apply for shares was untrue and misleading, on the ground that it concealed the fact that out of the nominal purchase money of 45,000*l*. a sum of 13,000*l*. had been paid to a promoter. Mr. Everitt, Q.C., and Mr. H. B. Buckley, appeared for the plaintiff; Mr. Rigby, Q.C., and Mr. C. H. Turner for the company; and Mr. Napier Higgins, Q.C., and Mr. Cozens-Hardy, Q.C., for the directors.

In the decision given there was not the slightest ambiguity, for Mr. Justice Manisty remarked that this was one of the clearest cases for rescinding a contract that he had ever come across. Although a prospectus of a company might set forth a glowing and sanguine account of its prospects, yet the facts stated therein ought to be substantially true. The prospectus in the present case was misleading, and in one respect—namely, as to the amount of the purchase-money—absolutely false. The price of the property was stated to be 45,000*l*., and the plaintiff was, therefore, justified in believing that he was investing his money in property worth the sum named, whereas the facts were that he was really investing it in property worth only 32,000*l*., the sum of 13,000*l*. having been paid to the promoter. His Lordship, therefore, made an order that the contract to take the shares should be rescinded and the register of the shareholders of the company forthwith rectified by the removal therefrom of the plaintiff's name. His Lordship also ordered the defendants to pay the costs of this action, and of an action brought by the plaintiff in the Queen's Bench Division against the same defendants.

#### DIRECT-ACTING STEAM PUMPS.

Some important improvements in connection with direct-acting steam pumps have been invented by Messrs. PEARNS and ADDYMAN, of West Gorton, near Manchester, these improvements being especially applicable where the valves of the main steam cylinder or cylinders are worked by a double-acting piston in a small steam cylinder, the object of their invention being an improved arrangement for cushioning the movements of the small piston and its connected parts, and their invention consists in so forming, combining, and arranging the cylinder, piston, valve, and ports, that the same small piston will not only work the valve or valves for the main steam cylinder, but cushion the movements. The cylinder, piston, and slide valve used are ordinary parts, but the cylinder is made with two ports for each end, one for steam to enter, the other for it to pass out or exhaust; the slide valve is made with extended lap at each end, so that in its central position all the ports will be covered. When the small slide valve is moved one way to admit steam at one end of the cylinder, the exhaust port at that end and the inlet port at the other end of the cylinder are covered, but the other exhaust port is uncovered. By the time the small piston has moved until the valve or valves of the main steam cylinder or cylinders has partly opened, the small piston will have covered the exhaust port left open, and the steam or mixed steam and air left at that end of the cylinder thus acts as a cushion, as there is no escape for it except by its pressure lifting the slide valve from its facing. The action is the same for the reverse movement.

If desired there is or may be a small lifting valve at each end of the small cylinder to allow steam when sufficiently compressed to escape from the cylinder into the steam-chest or into the exhaust cavity. The second part of the invention refers to means for governing the speed of the engine by regulating the throttle-valve supplying steam to the main cylinder or cylinders of direct acting steam pumps where the valve or valves of the main piston or pistons are moved by a small steam piston and cylinder, and consists in combining with the throttle valve a ram or piston and spring or weight, the spring or weight opening the throttle valve, and the pressure of water pumped by a small pump attached to the engine acting upon the ram or piston by increase of pressure as the speed increases to close the throttle valve, this arrangement being similar to those described in their patent of September, 1880, for governing the position of a ram or piston carrying or in connection with a T-lever for working the slide valve of the small cylinder, the piston of which works the valve or valves of the main cylinder or cylinders, and this part of the invention also consists in combining the present improvements with the improvements described in the specification of the patent mentioned.

GEOLOGICAL SOCIETY OF LONDON.—The anniversary meeting of the Geological Society was held at Burlington House, yesterday (Friday), when the usual reports were read, and the following medals and funds were presented. The Wollaston Medal was awarded to Dr. Franz Ritter von Hauer, the director of the Austrian Geological Survey; the Murchison Medal to Prof. J. Gosselet, of Lille; and the Lyell Medal to Dr. Lycett. The funds were distributed to the recipients in recognition of the value of their previous geological labours, and to aid them in their further researches. After reading the obituary notices of a rather large number of fellows deceased during the past year, among whom we may mention the names of R. Mallet, Amie Bone, E. W. Burney, A. Delesse, Sir Philip Egerton, and C. Moore. The President delivered the anniversary address, which may be considered a continuation of that of last year, com-

prising a similar history of the palaeontology of the Jurassic rocks of Britain, the following gentlemen were [elected the] officers for the ensuing year:—President: J. W. Hulke, Esq., F.R.S.; Vice-Presidents: Prof. P. M. Duncan, M.B., F.R.S.; J. Gwyn Jeffreys, LL.D., F.R.S.; Prof. N. S. Maskelyne, M.A., M.P., F.R.S.; Prof. J. Morris, M.A.—Secretaries: Prof. T. G. Bonney, M.A., F.R.S.; Professor J. W. Judd, F.R.S.—Foreign Secretary: Warrington W. Smyth, Esq., M.A., F.R.S.—Treasurer: Professor T. Wiltshire, M.A., F.L.S. The other members of Council are Messrs. H. Baerman, W. Carruthers, F.R.S., R. Etheridge, F.R.S., John Evans, D.C.L., LL.D., F.R.S., J. Clarke Hawkshaw, M.A., Rev. Edwin Hill, M.A., G. J. Hinde, Ph.D., Sir J. Lubbock, Bt., D.C.L., M.P., F.R.S., S. H. Paterson, Prof. J. Prestwich, M.A., F.R.S., F. W. Rudler, Prof. H. G. Seeley, F.R.S., W. Topley, and Henry Woodward, LL.D., F.R.S.

From Mr. JOHN B. REYNOLDS.—The markets continue to be in a very unsatisfactory state. Operators for the rise still endeavour to keep their bargains open in the hope that prices will rally. Sometimes it appears as if the hope was justified until some fresh cause for uneasiness transpires. For those who can take up and pay for what they buy, now without doubt is a good time to invest, notwithstanding it may appear as if quotations must yet rule more in favour of purchasers. Every bona fide buyer who comes forward relieves the market of a certain amount of pressure. In this state of matters it is not surprising that speculators are selling Grand Trunk descriptions freely. The history of this company might well be written for the information of those to whom money is of any value, and who are tempted every now and then to try a little speculation on the London Stock Exchange. The result of the South Devon meeting has been freely discussed in mining circles, and to many it has appeared incredible that such a discussion could have been raised simply because a director, who declares himself to be a share dealer, openly elects to follow up his profession or business by buying and selling shares in the company. This is we know delicate ground, but it would not be difficult to show that the director in question was the best friend the company ever had, and we are not surprised at the overwhelming result in his favour. Our information may be imperfect, and our conclusions wrong, but we feel quite safe in urging the South Devon shareholders to be unanimous and friendly together. This thought may be vigorously worked and quickly tested. This is a Limited Company, and its success would in many ways result in incalculable benefit. This thought leads on to another, and that is that if limited companies are wise they will spend as little as possible on the management, and as much as possible in the proper development of the mines.

We know of no reason whatever why a Limited Company should not be worked as cheaply as that of a Cost-book. A great deal of comment has been passed on Wheel Coates, and surprise expressed that so much should have been done in such a short time to save this mine (not company) from collapse. The surprising feature to us, however, is how it comes to pass that these shares have no quotation when there are quiet buyers on every hand at 1*l* 10*s*, and no sellers. A little enquiry into the position of this brilliant little Cost-book Company—a perfect pattern—would not be unprofitable. Reader, take this Journal, and as many back Journals as you can find, and as a result of your study, inform us why Wheel Coates Mine should be selling for only 7000*l*.? True it is as poor as Job. All the ends in this mine put together will not produce 20*l*. worth of tin per fathom, but what of that? Such is the state of things to-day, and there was a time when exactly the same might have been said of Dolcoath. The latter was in a splendid district, and the scene changed. The former is in a splendid district, and the scene will change. Reader, such is mining. To-day no one will have your mine in a gift. To-morrow all are after it at any price. Then do not trouble about what is—but try to anticipate what will be, as you will make money. Ah! West Kitty? Yes, we are glad we thought of that. Two years ago, not an ounce of tin to be found—to-day what and how much? Shares—what? Reader, do not sell West Kittys, and in your will give discretionary powers, for dividends are coming, and may be those you leave behind will be glad of them. We hope this peculiar article will be received in the spirit in which it is written, and then we are sure that some persons will make money by its perusal.

METEOROLOGICAL SOCIETY.—The papers read at the meeting on Wednesday were—Notes of Experiments on the Distribution of Pressure upon Flat Surfaces perpendicularly exposed to the Wind, by C. E. Burton, B.A., F.R.A.S., and R. H. Curtis, F.M.S. In the present state of aerodynamics it seems to be impossible to make an *a priori* investigation of the distribution of pressure on a surface exposed to the impact of the fluid in motion without introducing such limitations as under the solutions arrived at widely divergent from the results obtained by the experiments which have been hitherto made. The authors, therefore, proposed to themselves to attack the problem from the experimental side only, by a method which, as far as they know, has not been applied. In the case of air—the application of Pitot's tube, suitably modified in form to the simultaneous measurement of the pressures at the centre and at any en-centrally situated point of a pressure plate of known dimensions. The results of the preliminary experiments are given in the present paper—2. The Principle of New Zealand Weather Forecasts, by Commander R. A. Edwin, R.N., F.M.S.; 3. The High Atmospheric Pressure of the Middle of January, 1882, H. Sowerby Wallis, F.M.S. The electrical thermometer lent by Messrs. Siemens Brothers, for observing the temperature of the air at the summit of Boston Church Tower, was also exhibited.

LEAD MINING IN THE D'ERESBY MOUNTAIN DISTRICT.—The patience of shareholders seems on the point of being amply rewarded. Considerable attention is now centred in these mines, as there has been a good discovery in D'Eresby Mountain. North D'Eresby and Goddard's are also opening out well.

SANTA CRUZ SILVER AND COPPER MINING COMPANY.—A special meeting of shareholders was held yesterday to confirm the resolutions for voluntarily winding up the company, and also confirming the appointment of liquidators—Col. Cochrane, Mr. Sherson, and Mr. Gardiner. Since the meeting Mr. Sherson has died. A resolution was, therefore, passed confirming the winding up, and also confirming the appointment of the two remaining liquidators.

A RICH GOLD FIELD.—The Sydney Morning Herald of Dec. 29 says:—"Sensational finds are reported from Hanging Rock, near Nundle, a claim owned by a man named Razicka turning out extraordinarily rich, the fortunate holder up to last Saturday week having obtained 344½ oz. gold."

BWLCH.—The agent reports that the lode in the 50 east has greatly improved. In the stope in the 12 west, on the south lode, the lode is of great width and strength, and will yield fully 1½ ton of silver-lead ore per fathom. The other points in operation are also looking well, one point being worth fully 1 ton of ore per fathom.

WEST LISBURNE.—The London shaft, which commands the reserves of ore to the 46, has been timbered and secured, whilst the perpendicular shaft, to work the western portion of the mine, has been lined and put in thorough repair. The new powerful wheel will be ready in a few days, the wheel-pit, rods, and stand being put in position to receive it.

EAST WHEAL ROSE.—The special monthly report for January from the directors and the agents, published in another column, must be satisfactory to the shareholders. The existence of Innes lode, above the adit level, for a distance of 600 fms. in length by some 40 fms. in depth, is very important, when taken in connection with the value of the silver-lead ore which is being raised from the lode from the three stopes already opened. The lode, it is stated, is a mine in itself capable of making returns independent of Middleton and the other lodes below adit. A fourth stope, we understand, will be opened on Innes lode in a few days.

The Scottish-American Investment Company's annual report recommends a further dividend of 5 per cent., and a bonus of 5 per cent., making a total distribution for last year of 15 per cent. Half of the bonus is to be paid in March, and half with the interim dividend to be paid on account of the current year. After adding 25,000*l*. to the reserve fund, a balance of 761*l*. remains to be carried forward.

The following applications have been made to the Stock Exchange Committee:—Explosives Company (Limited) shares, settling-day, and quotation; Consnet Iron Company (Limited) shares, settling-day, and quotation; Hammond Electric Light and Power Supply Company (Limited) shares, settling-day, and quotation.

Mr. William Pearce, of Messrs. Elder and Co., of Glasgow, has joined the Board of the Milford Docks Company.

HOLLOWAY'S PILLS.—These pills are more efficacious in strengthening a debilitated constitution than any other medicine in the world. Persons of a nervous habit of body, and all who are suffering from weak digestive organs, or whose health has become deranged by affection, disordered stomach, or liver complaints, should lose no time in giving these admirable pills a fair trial. Coughs, colds, asthma, or shortness of breath are also within the range of the sanative powers of this very remarkable medicine. The cures effected by the pills are not superficial or temporary, but complete and permanent. They are as mild as they are efficacious, and may be given with confidence to delicate females and young children. Their action on the liver, stomach, and bowels is immediate, beneficial, and lasting, restoring order and health in every case.



## WATSON BROTHERS' MINING CIRCULAR.

WATSON BROTHERS,  
MINEOWNERS, STOCK AND SHARE DEALERS &c  
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The position of D'Eresby Mountain Company is this: In June, 1881, in accordance with a request of the principal shareholders to the directors, a special meeting was held to propose certain resolutions to subdivide the shares and increase the capital of the company. These resolutions were passed and subsequently confirmed at a special meeting on July 5, 1881, and duly registered. The shares were subdivided into 35,840, and 9160 new ones created, so as to make up 45,000 limited and fully paid. Of these 9160, 3072 were offered *pro rata* to the shareholders at 17. per share in the proportion of two shares for every 25 subdivided, or one original share. The balance of 3528 new shares were to be held in reserve by the directors. At present there are only about 40,000 shares, new issue included. Any of the shares out of the 3072 offered to old holders who were entitled to them and not taken up by them, the directors were empowered to dispose of to any other shareholders on such terms as they might think proper, but at not less than 17. per share.

Mr. Doble informs the directors that so far as tested the experiments in the Langford poor ores are highly successful, and he is satisfied they can be returned to a good profit. It should be remembered that the furnace, which is not even yet complete or in full work, does not belong to the company, but the directors were allowed to have 30 tons of their poor ores sent to it and smelted as an experiment, and until the said 30 tons have been actually turned into matte, the exact cost known, and its value ascertained, it is impossible for us to say more than that so far as tried the process is a success. We hope to know more of the actual result before the general meeting, which will soon be held.

The hanging part of the Great Gorse lode, both at Aberllyn (Gwyder Amalgamated) and D'Eresby Mountain, is graphite, or as it has been termed shale. At Aberllyn there is any amount of it, and a sample now before us has all the appearance of good plumbago, and will write on paper; in fact, we are writing this with a large but awkward specimen to handle. At the Wheal George, situated near Aberllyn, graphite has also been discovered, and works for utilising it are, we understand, being erected. We shall watch the experiment with some interest, and hope it may be eminently successful.

Violet Seton has just sold 23 tons of silver-lead ores for 207. 9s. 6d. per ton—the highest price we have observed for a long time. The mine is also selling good parcels of copper, as it is in the midst of the Seton and the rich copper mines of Camborne. Up to this time it has been worked by one gentleman only, who has expended between 20,000l. and 30,000l. upon it, a boldness on the part of the gallant Colonel that ought to be rewarded by success. Many people in the neighbourhood have been anxious to join in the speculation, and we are informed that a Cost-book has been formed, dividing the mine into 6000 shares, all liabilities to be cleared off to the end of December last, and leaving 1500l. cash balance in hand also to that date, and the Cost-book company to have credit for ores in the mine and ready for market valued at 1000l. To show what has been done by the sole enterprise of one gentleman we may remark (having lately had the mine inspected). Three engine-shafts have been sunk—Violet, 75 fathoms deep from surface; Nicholl's, 50 fathoms; Johnny's, 40 fathoms; and the following engines have been erected—a 70-in. cylinder pumping at Nicholl's shaft, a 66-in. ditto at Violet, and a 16-in. ditto at Wheal Johnny. Also 20-in. engine for winding and crushing, 12-in. ditto, 6-in. vertical engine for general purposes, and a 6-in. double-air compressor. A good deal of ground has been opened, and several good points in progress. The copper ore sales have been—Aug. 2, 1881, 368l. 12s. 8d.; Oct. 6, 451l. 1s.; Dec. 1, 651l. 10s.

The new shaft at Wheal Crebor is now complete to the 132, and in a few days the lode will be cut through and new levels started east and west. This is the great point to which we have been directing attention for years past, and to accomplish which a vast amount of money has been spent, the shaft having been commenced from surface. In the 120 a rich course of ore was gone over for a long distance, and there is every reason to expect a good lode also in the 132.

The No. 5 end south at D'Eresby Mountain has improved to 5 tons of ore per fathom—other points 3½ tons. An agent in the district (formerly at Roman Gravel and now at North D'Eresby) has written a friend in London regarding the mine; and as we have been favoured with a copy of the letter, and independent testimony is always acceptable, we give it here. "Ever since your first letter came taking notice of the improvement at D'Eresby Mountain I have made every enquiry and have seen Captain Sandoe. Examined all the stuff coming up from the mine, and I assure you if they can keep on winding such beautiful solid lead ore as I saw to-day (14th) they must decidedly have a good mine and no knowing the good it will do this district. It is the prettiest stuff I have ever seen in Carnarvonshire, precisely the same character of lode as the Roman Gravel at same depth from surface. Whoever lives to see it, I am sure there is a good mine in the D'Eresby Big Vein, such a body of carbonate of lime cannot fail to make a rich mine in depth."

At Clementina (Gwydwr Amalgamated) there has been a great flood of water this week from the bottom level end north (44). This for a time filled the level, and the shaft 2 or 3 fathoms high, and is an indication, in our opinion, of a course of ore near at hand. Above the 34 level large quantities of lead were raised and we have always looked upon this mine as likely to be one of the best in the district.

The directors of D'Eresby Mountain fixed this day (Friday) as the last on which applications from those entitled to a *pro rata* number of the issue of last July at 17. each could be received; as it was hardly right or fair that those who had not hitherto applied, and had left the mine practically to be carried on by ourselves for some months past, should be able to apply when shares might be worth double the money on the market. Thus no more shares, we understand, will be issued by the company, and we are glad to learn that those already taken will place the mine in an independent position, and henceforth we shall look forward to profits.

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20 horse PORTABLE WINDING ENGINE, with two 10½ in. cylinders, link motion, and winding gear, drum 5 ft. 6 in. diameter, only worked a few weeks, and since been thoroughly overhauled by the makers; equal to new.  
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(Signed) G. BARNEWITZ, Treasurer.

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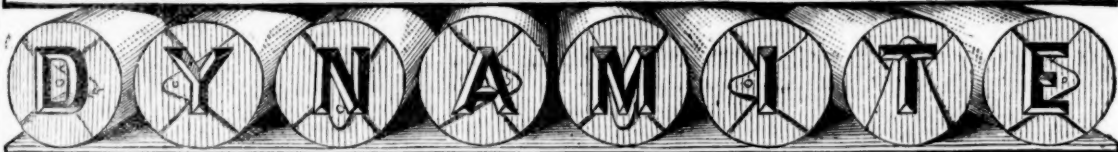
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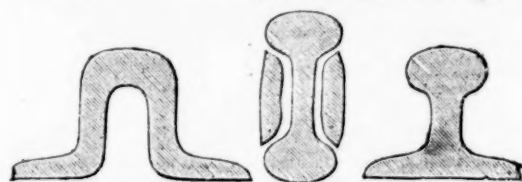
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3939 Blue Hills, t, c, St. Agnes	4 6	6 2	2 1/2	0 4	0 0	May 1881
10000 Caron, t, Cardigan	2 0	0 0	3/4	0 4	0 0	Oct. 1878
6000 Carn Brea, c, t, Illogan	9 7	11 22	19 21	52 11	8 0	10 0
10240 Devon Gt. Consols, c, a, Tavistock	1 0	0 0	3/4	0 4	0 0	Dec. 1880
4296 Dolcoath, c, t, Camborne	10 14	10 82	79 81	127 13	9 2	2 10
4840 East Pool, t, c, Illogan	0 0	0 0	44 45	27 11	8 0	1 10
12550 Frogoch, t, c, Cardigan (1000 sh. in)	2 0	0 0	3/4	0 4	0 0	Jan. 1881
40000 Glasgow, c, t, (30000 sh. in)	15 0	15 0	15 0	0 13	0 0	Aug. 1878
12000 Great Holway, t, Flintshire	5 0	0 0	5/4	0 5	0 0	Oct. 1882
15000 Great Laxey, t, Isle of Man	4 0	0 0	18 17	27 18	0 0	Jan. 1882
6400 Green Hurth, t, Durham	0 6	0 0	7 3/4	3 7	0 0	Jan. 1882
20000 Grogwion, t, Cardigan	2 0	0 0	3 2	0 16	0 0	1 6
10240 Gunnislake (Clitters), t, c	2 2	0 0	3/4	0 17	9 0	2 0
2800 Isle of Man, t, Isle of Man	25 0	0 0	0 0	83 5	0 1	0 0
20000 Leadhills, t, Lanarkshire	6 0	0 0	2 2 1/2	0 15	0 0	3 0
430 Lisburne, t, Cardigan	15 0	0 0	0 0	611 10	0 1	0 0
10000 McLanear, c, t, Hayle	5 0	0 0	4 3/4	0 12	0 0	Feb. 1882
9000 Minera Mining Co., t, Wrexham	5 0	0 0	9 3/4	69 3	8 0	1 6
20000 Mining Co. of Ireland, c, t, t	7 0	0 0	2 1/2	24 0	0 0	2 6
8000 Mona, c, Anglesea	5 0	0 0	6 1/4	0 10	0 0	10 0
11529 North Hendre, t, Wales	2 10	0 0	6 5 1/2	3 14	0 0	2 6
8146 Ditto	1 5	0 0	3 3 1/4	0 9	3 0	1 3
2000 North Levant, t, c, St. Just	13 6	0 0	4 3/4	4 16	0 0	3 0
5000 Penhall, t, St. Agnes	3 17	6 1	3 1/4	3 17	0 0	1 6
6000 Pennant, t, bar, North Wales	5 0	0 0	4 5/8	0 10	0 0	5 0
12000 Phoenix United, t, c, Link	6 0	3 3/4	3 3/4	17 3	0 0	2 6
18000 R. Patrick, t, c, Cardigan (12000 p. 10 p.)	1 0	0 0	1 1/4	0 4	0 0	1 0
10000 Red Rock, t, Cardigan	2 0	0 0	2 1/2	0 4	0 0	2 0
12000 Roman Gravel, t, Salop	7 10	0 0	9 3/4	8 16	0 0	5 0
4000 Rhydalun, t, Wales	10 0	0 0	0 0	0 5	0 0	5 0
512 South Cardigan, c, St. Cleer	1 5	0 0	25 27 1/2	749 0	0 1	0 0
6123 South Courdurow, t, c, Camborne	6 5	6 10	9 9 1/4	6 18	0 0	5 0
5000 South Darren, t, Cardigan	1 16	0 0	1 1/4	0 4	0 0	2 0
4000 South Wheel Franks, t, Illogan	7 12	4 15	14 15	40 15	6 10	0 0
5000 Tincroft, c, t, Pool, Illogan	11 10	0 0	16 16 1/2	51 3	6 0	5 0
15000 Van, t, Llanidloes	4 5	0 0	7 3/4	55 8	0 0	2 6
3000 West Chiverton, t, Perranabuloe	21 7	6 3/4	3 3/4	55 10	0 0	1 0
12000 West Holway, t, Flintshire	1 0	0 0	1 1/4	0 1	0 0	1 0
512 West Tolgus, c, Redruth	95 10	0 0	22 22	3 0	0 0	1 0
2000 West Wheel Seton, c, Camborne	29 0	0 0	14 15	223 0	0 0	7 6
6000 West Basset, c, Illogan	7 0	4 14	13 14 1/2	27 17	0 0	5 0
12000 Wheel Oreber, c, Tavistock	2 4	0 0	3 2 1/2	0 12	9 0	2 6
1024 Wheel Eliza Consols, t, St. Austell	18 0	0 0	0 0	42 10	8 0	0 0
6000 Wheel Grenville, t, Camborne	15 0	0 0	11 11 1/2	1 0	0 0	7 6
4295 Wheel Killy, t, St. Agnes	5 4	6 3/4	3 3/4	12 18	6 0	1 6
3000 Wheel Peavor, t, Redruth	7 11	0 0	10 9 1/2	8 9	6 0	5 0

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Shares.	Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
35500 Alamillos, t, Spain	2 0	0 0	1 1/4	2 4	0 0	1 3
130000 Almada and Tinto Consol., t	1 0	0 0	3/4	0 6	3 0	1 0
20000 Australian, c, South Australia	7 7	6 1/2	1 3/4	0 5	0 0	2 0
15000 Birdseye Creek, c, California	4 0	0 0	1 1/4	0 18	0 0	2 0
20000 Cape Copper Mining, t, South Africa	7 0	0 0	48 48	44 7	6 10	0 0
35000 Cesena Sulph. Co., Romagna, Italy	10 0	0 0	0 0	1 16	0 0	1 0
60000 Copiapo, c, Chile (44 shares)	8 0	0 0	3 1/4	2 3	0 0	2 0
70000 English & Australian, t, c, S. Aust.	2 10	0 0	1 1/4	2 19	9 0	1 0
25000 Fortuna, t, Spain	2 0	0 0	3 3/4	7 19	2 0	2 0
60000 Frontino & Bolivia, g, New Gran.	2 0	0 0	3 3/4	0 8	0 0	2 0
200000 La Plata, t, Leadville	2 0	0 0	2 1/4	0 10	0 0	5 0
15000 Linars, t, Spain	3 0	0 0	4 3/4	13 17	0 0	3 0
60000 New Quebrada, c, Venezuela	5 0	0 0	4 4 1/2	0 5	6 0	3 0
1000 Ditto, Debutentes	100 0	0 0	100 95 100	6	per cent.	0 0
30000 Oregon, g, Oregon, U.S. (pref. sh.)	4 0	0 0	0 0	0 2	6 0	2 6
50000 Panulua, c, Chile (10000 sh. in)	10 0	0 0	5 1/4	0 16	9 0	3 0
25000 Pontigault, t, France	20 0	0 0	11 9 1/2	23 17	6 0	7 6
100000 Port Phillip, g, Clunes (42 shares)	1 0	0 0	3 3/4	1 14	2 0	10 0
50000 Kara Fortuna, t, Argent. Republic	1 0	0 0	0 0	3 2	0 0	1 0
54000 Richmond Consol., c, Nevada	5 0	0 0	10 10 1/2	13 11	6 0	10 0
24532 Rio Tinto, c, Mortgage Bds., Huelva	100 0	0 0	100 102	5	per cent.	0 0
325000 Ditto, shares	10 0	0 0	25 24 25	0 18	0 0	8 0
40000 Santa Barbara, g, Brazil	10 0	0 0	13 13 1/2	0 11	9 0	1 0
120000 Scottish Australian Mining Co., t	1 0	0 0	1 1/4	10 p. cent.	0 0	Oct. 1881
80000 Ditto, New	10 0	0 0	3 3/4	10 p. cent.	0 0	Oct. 1881
50000 Serravallo, t, c, Arica, Chile	10 0	0 0	1 1/4	2 2	0 0	2 0
22500 Sierra Buttes, g, California	2 0	0 0	1 1/4	2 2	0 0	2 0
40625 Ditto, Plumas Eureka	2 0	0 0	2 1/4	2 13	2 0	3 0
100000 So. Indian, t, Madras (fully pd.)	1 0	0 0	1 1/4	0 4	0 0	4 0
92566 St. John del Rey (45000 shares and multiples dealt in)	185 195	5 p. c.	for half-year, Dec. 1881	6 10	2 10	0 0
92566 Tharsis, c, t, Spain (31000 sh. in)	10 0	0 0	43 39 1/2	6 10	2 10	0 0
20000 Tolima, g, Colombia	5 0	0 0	3 3/4	2 1	6 0	5 0
25000 Victoria (London), g, Australia	1 0	0 0	0 0	0 13	0 0	8 0
100000 Victoria (Nevada, U.S.) Deb. Bds.	1 0	0 0	0 0	0 0	0 0	6 0
15000 Western Andes, g, Colombia	0 0	0 0	0 0	2 13	0 0	2 0
2100 W. Prussian (55000 pref. sh. £10 pd.)	10 0	0 0	9 10	4 2	0 0	8 0

Have made calls since last dividend was paid.

## NON-DIVIDEND BRITISH MINES.

Shares.	Paid.	Last wk.	Clos. pr.
30000 Alston United, t, Cumberland	1 0	0 0	3/4
12000 Asheton, t, Carnarvonshire	5 0	0 0	3/4
11583 Bedford Unit, t, c, Tavis. (£1 liab.)	0 10	0 0	1 1/4
30000 Blackburnbanks & Gildersdale, t	0 5	0 0	3/4
30000 Bodidra, t, t, Denbighshire	1 0	0 0	3/4
30000 British, t, t, Wrexham	1 0	0 0	1 1/4
30000 Beune Consols, t, Flintshire	1 0	0 0	3/4
20000 Bwch United, t, Cardigan	0 17	6 2	2 1/2
50000 Cambrian, t, c, Cardigan	2 0	0 0	3/4
50000 Carn Camborne, t, c, Camborne	1 0	0 0	1 1/4
20000 Carnarvon, t, c, Carnarvonshire	1 0	0 0	3/4
37500 Carnarvonshire Cons., t, Llanrwst	2 0	0 0	1 1/4
30000 Capella Consols, t, St. Stephens	1 0	0 0	3/4
6000 Cathedral Cons., t, Gwynedd	0 13	0 0	0 0
20000 Central Foxdale, t, Isle of Man	1 17	6 2	2 2 1/2
25000 Condy-Fed & Pant-y-faen, t	1 0	0 0	1 1/4
24500 Cook's Kitchen, t, Illogan	30 14	30 23	23 23
15500 Court Grange United, t, t	1 0	0 0	0 0
6400 Crook Burn, t, Cumberland	0 17	0 0	3/4
14000 Crosswood Mining Lands, t	1 0	0 0	1 1/4
45000 D'Eresby Mount, t, t, Llanrwst	0 10	0 0	2 1/4
20000 Denbighshire Consolidated, t	3 0	0 0	0 0
12000 Derwent, t, Durham	4 0	0 0	1 1/4
50000 Devon, t, t, Tavistock	1 0	0 0	3/4
50000 Devon Friendship, t, c, Tavistock	1 0	0 0	3/4
30000 Devon Great United, t, t, Tavistock	1 0	0 0	3/4
50000 Drakewalls, t, c, Calstock	0 15	0 0	3/4
10000 Dobby Syke, t, Durham	1 0	0 0	3/4
12000 East Blue Hills, t, St. Agnes	0 5	0 0	3/4
6000 East Botallack, t, St. Just	0 8	0 0	1 1/4
6144 East Caradon, c, St. Cleer	4 6	0 0	3/4
5000 East Chiverton, t, Perranabuloe	10 7	3 3/4	2 1/4
30000 E. Craven Moor, t, Pateley Bridge	1 0	0 0	3/4
15000 East Devon Cons., t, c, Buckfast	2 0	0 0	3 2 1/2
50000 East Herodfoot, t, t, Liskeard	1 0	0 0	1 1/4
25000 East Long Rake, t, t, Wales	1 0	0 0	1 1/4
21000 East Roman Gravel, t, Salop	0 15	0 0	3/4
18000 East Van, t, Llanidloes	5 0	0 0	1 1/4
2018 East Wheel Lovell, t, Helston	15 13	3 2	2 3
10000 East Wheel Rose, t, t, Newlyn East	10 17	6 3/4	3 3/4
12000 Gawton, t, c, Tavistock (21 shares)	1 16	0 0	3/4
14000 Glenroy, t, t, Isle of Man	4 0	0 0	3/4
30000 Gobbett, t, Dartmoor	1 0	0 0	1 1/4
10000 Goddards, t, t, Carnarvon	1 0	0 0	1 1/4
30000 Goghan, t, t, Cardigan	1 0	0 0	1 1/4
10000 Goodwin, t, t, Llanidloes	1 0	0 0	1 1/4
8500 Gorse and Merlyn Cons., t, t, Flint	2 10	0 0	3 2 1/2
20000 Great Dyfford (10000 sh. issued)	1 0	0 0	1 1/4
10000 Great Polgoth United, t	1 0	0 0	1 1/4
6000 Great West Chiverton, t, St. Agnes	0 5	0 0	3/4
10000 Gwyn-y-Mynydd, t, t, Flint (pref.)	4 0	0 0	0 0
7000 Gwydyr Aml, t, t, Carnarvon	1 0	0 0	3/4
12000 Herodfoot, t, near Liskeard	0 13	9 1	3/4
18000 Hingsdon Down, c, Calstock	0 12	0 0	1 1/4
20000 Kirkehead, t, t, (20000 unissued)	1 0	0 0	1 1/4
6000 Killbreth, t, Chacewater	4 3	0 0	2 1/4
25000 Kit Hill Gt. Cons., t, c, Arisaema (24 sh. pd.)	0 15	0 0	3/4
10000 Lady Ann, t, t, Llanarmon	1 0	0 0	1 1/4
30000 Lady Ashburton, t, c, Callington	1 0	0 0	3/4
15000 Lady Bertha, t, c, Tavistock	1 0	0 0	0 0
25000 Langford, t, c, Callington	0 10	0 0	3/4
25000 Levant, t, t, St. Just	11 10	0 0	11 9 1/2
15000 Llandegla, t, t, Wales	1 0	0 0	1 1/4
10000 Lomax, t, t, Helston	1 0	0 0	1 1/4
5120 Lovell, t, t, Wendron	0 16	0 0	1 1/4
6000 Marke Valley, c, Linkinhorne	6 1	0 0	3/4
20000 Mid-Devon, t, c, t, (34 sh. pd.)	0 6	8 0	0 0
20000 Mona Consols, t, c, Anglesea	1 0	0 0	1 1/4
15000 Monkstown, t, t, Devon	2 0	0 0	2 1/4
20000 Mostyn Consols, t, t, Flint	1 0	0 0	2 1/4
10000 Mynydd Goredig, t, Cardigan	4 0	0 0	3 3/4
12000 Morfa Du, t, g, Anglesea	1 0	0 0	3/4
8000 Mounts Bay, t, t, Breage	0 15	0 0	3/4
6144 Mount Carbis, t, c, Redruth	1 5	0 0	3 3/4
2400 New Cook's Kitchen, t, Illogan	8 10	0 0	3 3/4
5000 New Dolcoath, t, c, Camborne	0 0	0 0	0 0
100000 New Great Wheel Vor, t, Breage	0 10	0 0	3/4
10000 New Holmshurst, t, c, Callington	2 10	0 0	0 0
6000 New Killy, t, St. Agnes	0 10	0 0	2 1/4
12000 New Penrose, t, c, Helston	1 0	0 0	1 1/4
15000 New Redmoor, t, c, Callington	1 0	0 0	1 1/4
3500 New Tincroft, t, t, Lelant	6 0	0 0	0 0
2000 New Trumpet, t, t, Fendron	0 10	0 0	1 1/4
2000 New West Cardigan, c, Llanarmon	0 3	0 0	0 0
3000 New Wheel Peavor, t, Redruth	0 10	0 0	3/4
25000 New Wye Valley, t, t, Montgomery	1 0	0 0	1 1/4
30000 North Alfred, c, t, Phillack	0 10	0 0	1 1/4
5328 North Busy, t, c, Blackwater	0 15	8 0	3/4

## NON-DIVIDEND MINES—continued.

Shares.	Paid.	Last wk.	Clos. pr.
10000 N. D'Eresby Mount, t, t, Carnarv.	1 0 0	0 0	3/4
25000 North Goginan, t, t, Cardiganshire	1 0 0	0 0	1 1/4
6400 North Green Hurth, (3400 li. pd.)	0 2 8	0 0	3/4
12000 North Herodfoot, t, t, Liskeard	0 8 0	0 0	3/4
50000 North Molton, t, c, m, t, Devon	1 0 0	0 0	3/4
6000 North Penstruthal, t, c, Gwynedd	1 19 6	0 0	3/4
2938 North Trekerby, c, St. Agnes	5 17 10	0 0	3/4
8000 Northern, t, t, Durham	1 0 0	0 0	1
40000 Okel Tor, t, c, a, Calstock	1 0 0	1 1/2	1 1/4
80000 Old Shepherds, t, c, Cornwall	0 15 0	0 0	3/4
12000 Pandora, t, t, Carnarvon	2 0 0	0 0	3/4
11612 Pant-y-Mwyn, t, t, Mold	2 0 0	0 0	2 1/4
45000 Parys Corporation, t, c, Anglesea	1 0 0	0 0	3/4
7500 Pateley Bridge, t, t, Yorkshire	1 0 0	0 0	3/4
6000 Pedy-an-dreth, t, c, Redruth	2 13 0	0 0	3 3/4
12000 Pelyn Wood, c, Llanvilly	0 5 6	0 0	3/4
600 Pendarves United, c, Camborne	8 0 0	0 0	3/4
12000 Pen-y-rs-Odd, t, t, Flintshire	1 0 0	0 0	1 1/4
15000 Perran Consols, t, t, Cornwall	1 0 0	0 0	1 1/4
100000 Pioneer, t, var. Wales	1 0 0	0 0	1 1/4
10000 Polrose, t, t, Cornwall	0 15 0	0 0	3/4
10000 Port Nigel, t, t, Carnarvonshire	2 0 0	2 0	1 1/4
6000 Prince Royal, t, c, s, St. Agnes	1 0 6	0 0	3/4
6000 Prince of Wales, c, t, Stock	0 13 0	0 0	3/4
15000 Royalton, t, t, St. Columb	0 15 0	0 0	1 1/4
32000 Russell United, c, t, Tavistock	0 15 6	0 0	1 1/4
30000 Silver Hill, t, t, Callington	0 10 0	0 0	1 1/4
50000 Sinclair, t, t, bl, Whitford	1 0 0	0 0	1 1/4
40000 Sortridge, c, t, Horrabridge	1 0 0	0 0	1 1/4
6000 South Carbis, t, c, Redruth	0 10 0	1 1/2	1 1/4
35000 So. Devon Unit, t, c, Buckfastleigh	1 0 0	1 1/2	1 1/4
5000 South Dolcoath, c, t, Illogan	0 12 0	1 0	3/4
6000 South Penstruthal, t, c, Gwynedd	1 17 6	0 0	3/4
6000 South Penryn, t, c, Camborne	4 14 0	2 1/2	2 1/4
40000 South Western Crebors, t, c, Tavistock	1 10 0	1 1/2	1 1/4
2043 South Wheel Croft, c, Illogan	15 14 6	8 0	8 0
40000 Tamar, s, t, Bearlston	1 0 0	1 1/2	1 1/4
110000 Tankerville Gt. Consols, t, Salop	0 15 0	0 0	3/4
6400 Teakdale, t, t, Durham (pref.)	1 0 0	0 0	3/4
20000 Tin Hill, t, t, St. Stephens	1 0 0	1 1/2	1 1/4
10000 Temple, t, t, Cardigan	1 0 0	0 0	3/4
6000 Tregumbo, t, c, Cornwall	nil	0 0	3/4
12000 Trevince Consols, t, c, Gwynedd	0 5 0	0 0	3/4
10000 Ty-y-nant, t, t, Cardiganshire	1 0 0	1 1/2	1 1/4
35000 Van, Van & Lyle, t, t, (pref. sh)	1 0 0	0 0	3/4
10000 Vaughan, t, t, Cardiganshire	10 0 0	0 0	3/4
18000 Victor, t, t, Clifton, Flintshire	0 14 0	0 0	3/4
20000 Waltham United, t, c, t, Tavistock	1 0 0	0 0	3/4
12000 West Ashleton, t, t, Carnarvon	1 0 0	2 0	1 1/4
12000 West Caradon, c, St. Cleer	0 7 3	1 0	3/4
3000 W. Craven Moor, t, t, Pateley Bridge	10 0 0	0 0	3/4
12000 West Crebors, c, t, Tavistock	0 5 0	0 0	3/4
10240 West Devine Consols, c, t, Calstock	1 0 0	1 1/2	1 1/4
10000 West Gillingham, t, c, Breage	0 13 6	2 1/2	2 1/4
20000 West Killy, t, t, St. Hilary	0 12 0	0 0	3/4
80000 W. Laburne, t, t, (12 sh.) t, Cardigan	1 0 0	1 1/2	1 1/4
3000 West Mary Ann, t, t, Menheniot	1 13 0	0 0	3/4
20000 W. Pateley Bridge, t, t, Yorkshire	1 0 0	1 0	3/4
12000 West Phoenix, t, t, c, Linkinhorne	0 16 2	1 1/2	1 1/4
6000 West Polbrene, t, c, St. Agnes	0 3 0	1 1/2	1 1/4
5190 West Poldice, St. Day	6 0 0	6 0	5 1/2
10000 West Vor, t, t, Helston	2 0 0	2 0	1 1/2
2043 West Wheel Frances, t, t, Illogan	31 8 3	12 0	12 0
3000 West Wheel Favour, t, Redruth	3 0 6	14 1/2	13 1/4
12000 West W. W. Valley, t, t, Montgomery	3 0 0	0 0	3/4
10000 Wheel Agar, c, Illogan	0 0 0	0 0	3/4
6144 Wheel Bassett, c, Illogan	6 0 0	13 1/2	11 1/2
3000 Wheel Boys, t, Redruth	0 13 0	5 1/2	5 1/2
12000 Wheel Coates, t, St. Agnes	0 2 0	2 1/2	1 1/4
12000 Wheel Colt, t, St. Agnes	nil	0 0	3/4
2585 W. Conf., & No. Tres, t, c, Gwynedd	2 2 0	2 1/2	2 1/4
50000 Wheel Elizabeth, t, t, Cornwall	1 0 0	0 0	3/4
5000 W. Fortune, t, c, t, Harrowbarrow	1 0 0	3 0	2 1/4
15000 Wheel George, t, t, bl, Carnarvon	1 0 0	3 1/2	3 1/4
12285 Wheel Great, t, t, St. Hilary	1 14 2	1 1/2	1 1/4
25000 Wheel Jewell, c, St. Hilary	0 13 0	2 1/2	2 1/4
25000 Wh. Honey and Trelawny, t, t, St. Hilary	2 0 0	2 1/2	2 1/4
12000 Wheel Lusk, t, t, Callington	0 6 0	1 0	3/4
2000 Wheel Owles, t, St. Just	1 3 0	11 0	11 0
6000 Wh. Prussia, & Cardew, t, c, Redruth	2 0 0	1 1/2	1 1/4
6000 Wheel Sisters, t, t, Lelant	3 10 0	1 1/2	1 1/4
4000 Wheel Uny, t, c, Redruth	16 3 0	3 1/2	3 1/4
4000 Yatwith, t, t, Cardigan	1 0 0	0 0	3/4